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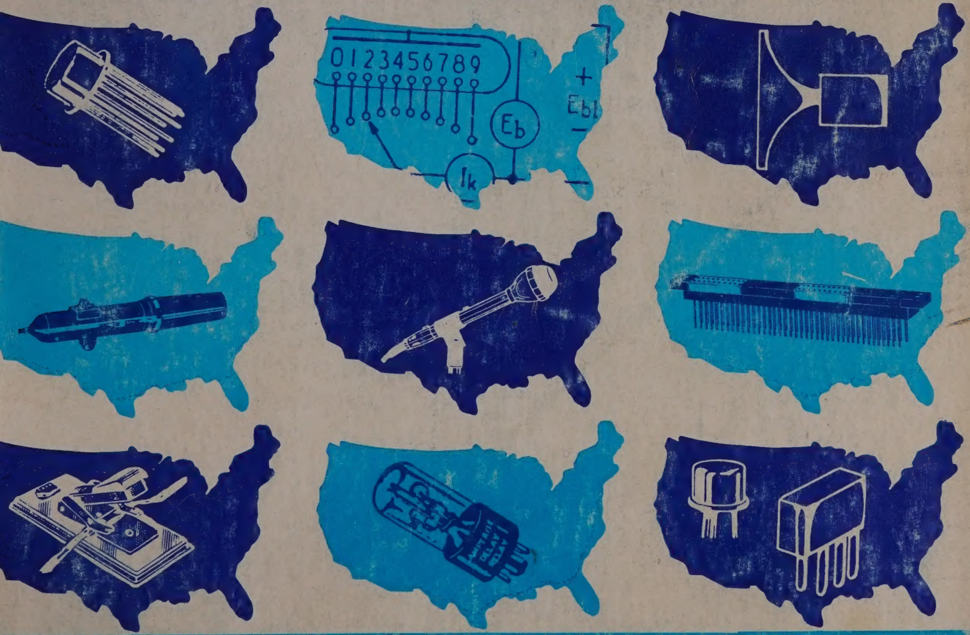
EDRI BUYER'S GUIDE

FIRST EDITION

FOR ELECTRONICS



WHOLESALE ELECTRONICS
Lima Radio Parts Company, Inc.

EDRI BUYERS GUIDE
Electronic Distributors Research Institute

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SEMICONDUCTOR GUIDE

This Guide represents the more common semiconductors. Prices are a composite of many sources and reflect the most accurate available at publication. While these will vary at time of purchase, this Guide should be helpful in budget planning.

DEVICE	1-99	100-999
1N34A	.30	.23
1N38A	.30	.23
1N48	.30	.23
1N54A	.30	.23
1N55A	.39	.30
1N58A	.35	.28
1N60	.30	.23
1N63	.35	.28
1N64	.35	.26
1N65	.30	.23
1N67A	.30	.23
1N68A	.40	.30
1N69A	.35	.26
1N70A	.39	.30
1N81A	.39	.30
1N82A	.85	.68
1N87A	.40	.30
1N90	.30	.23
1N91	.99	.66
1N92	2.15	1.43
1N93	2.97	1.98
1N98A	.30	.23
1N99	.30	.23
1N100	.30	.23
1N115	.30	.23
1N116	.30	.23
1N117	.30	.23
1N118A	.30	.23
1N119	.35	.26
1N120	.35	.26
1N126A	.30	.23
1N127A	.35	.26
1N128	.30	.23
1N191	.30	.23
1N192	.30	.23
1N198	.35	.26
1N225 thru 1N233	2.95	2.05
1N225A thru 1N233A	3.35	2.25
1N234 thru 1N239	3.35	2.25
1N234A thru 1N239A	4.85	3.75
1N248/A/B/C(R)	1.75	1.39
1N249/A/B/C(R)	1.90	1.45
1N250/A/B/C(R)	2.60	1.82
1N251	.30	.23
1N252	.30	.23
1N253	1.20	.79
1N254	2.31	1.60
1N255	2.89	1.98
1N256	4.04	2.76
1N270	.30	.23
1N277	.30	.23
1N279	.35	.26
1N281	.35	.26
1N283	.35	.26
1N294	.35	.26
1N295	.30	.23
1N297	.35	.26
1N298	.30	.26
1N316	.84	.58
1N317	1.00	.70
1N318	1.42	.93
1N319	1.84	1.27
1N320	2.63	1.66
1332	1.79	1.27
1N333	1.79	1.27
1N334	1.47	1.00
1N335	1.47	1.00
1N336	1.16	.83
1N337	1.16	.83
1N338	1.10	.78
1N339	1.10	.78
1N340	1.10	.78
1N341	1.79	1.27
1342	1.79	1.27
1N343	1.02	.71
1N344	1.47	1.00
1N345	1.49	1.07
1N346	1.16	.83
1N347	1.10	.78
1N348	1.10	.78
1N349	1.10	.78
1N429	5.25	4.53
1N430	16.28	13.67
1N430A	24.36	22.00
1N440B	.69	.48
1N441B	.72	.50
1N442B	.83	.59
1N443B	1.02	.71
1N444B	1.10	.78
1N445B	1.49	1.05
1N456/A	.34	.22
1N457/A	.38	.28
1N458/A	.38	.28
1N459/A	.38	.28
1N461/A	.34	.23
1N462/A	.36	.24
1N463/A	.38	.28
1N464/A	.38	.28
1N465 thru 1N470	2.95	2.05
1N465A thru 1N470A	3.05	2.15
1N465B thru 1N470B	4.80	3.95
1N471 thru 1N475	3.00	2.25
1N471A thru 1N475A	3.80	2.90
1N482/A/B	.38	.28
1N483/A/B	.38	.28
1N484/A/B	.38	.28
1N485/A/B	.60	.45
1N486/A/B	.60	.45
1N487/A/B	.60	.45
1N488/A/B	.60	.45
1N497	.38	.29
1N498	.38	.29
1N500	.38	.29
1N530	.51	.36
1N531	.55	.38
1N532	.62	.43
1N533	.95	.70
1N534	1.10	.82
1N535	1.35	1.05
1N536	.44	.32
1N537	.49	.36
1N538	.55	.38
1N539	.62	.43
1N540	.70	.47
1N541	.39	.30
1N542	.75	.55
1N547	1.00	.66
1N550	1.35	.95
1N551	1.45	1.02
1N552	1.86	1.30
1N553	2.10	1.48
1N554	2.21	1.54
1N555	3.15	2.21
1N560	1.89	1.32
1N561	3.71	2.59
1N562	5.63	3.94
1N563	11.27	7.89
1N570	5.25	5.25
1N599/A	.53	.39
1N600/A	.63	.44
1N601/A	.63	.45
1N602/A	.65	.47
1N603/A	.68	.48
1N604/A	1.00	.78
1N605/A	1.37	.88
1N606/A	2.10	1.49
1N607/A	1.31	.91
1N609/A	1.41	.98
1N610/A	1.45	1.02
1N611/A	1.86	1.30
1N612/A	2.27	1.59
1N613/A	2.68	1.82
1N614/A	3.31	2.32
1N625/A	.38	.28
1N626/A	.38	.28
1N627/A	.38	.28
1N628/A	.38	.28
1N629/A	.38	.28
1N631	.30	.23
1N632	.30	.23
1N633	.30	.23
1N634	.30	.23
1N636	.30	.23
1N643/A	.88	.53
1N645/A	.88	.53
1N646	.88	.53
1N647	1.00	.75
1N648	1.00	.75
1N649	1.00	.75
1N658	.48	.35
1N659	.48	.35
1N660	.48	.35
1N661	.48	.35
1N662/A	.45	.30
1N663/A	.57	.35
1N695	.30	.23
1N702/A thru 1N732/A	.77	.57
1N733/A thru 1N745/A	.90	.70
1N746/A thru 1N759/A	.90	.70
1N761 thru 1N769	.85	.65
1N770	.30	.23
1N805	.30	.23
1N815	.30	.23
1N816	.30	.23
1N817	.30	.23
1N821	2.22	1.12
1N821A	2.32	1.17
1N822	2.15	1.90
1N823	2.92	1.47
1N823A	3.12	1.57
1N824	11.22	5.62
1N825	4.67	2.32
1N825A	5.22	2.62
1N826	8.02	4.02
1N827	8.72	4.37
1N827A	10.47	5.22
1N828	8.82	4.42
1N829	13.07	6.52
1N829A	15.67	7.82
1N903/A	.50	.38
1N904/A	.50	.38
1N905/A	.50	.38
1N906/A	.50	.38
1N907/A	.50	.38
1N908/A	.50	.38
1N914	.30	.20
1N914A	.40	.26
1N914B	.80	.54
1N916	.52	.34
1N916A	.58	.38
1N916B	1.07	.71
1N933	.96	.70
1N935	1.87	.92
1N935A	2.12	1.07
1N935B	2.87	1.42
1N936	2.22	1.12
1N936A	2.87	1.42
1N936B	3.37	1.72
1N937	4.32	2.17
1N937A	4.92	2.47
1N937B	5.72	2.87
1N938	5.57	2.82
1N938A	6.07	3.02
1N938B	8.02	4.02
1N939	14.42	7.22
1N939A	20.32	10.17
1N939B	26.18	13.85
1N940	31.32	22.02
1N940A	35.02	24.30
1N940B	40.02	28.26
1N941/A/B	2.15	1.85
1N942/A/B	2.90	2.25
1N943/A/B	4.25	3.65
1N944/A/B	8.05	5.95
1N945/A/B	22.50	14.25
1N946	29.75	18.00
1N946A	35.25	24.50
1N946B	42.75	35.75
1N949	.30	.23
1N957/A/B	.95	.72
1N984/A/B		
1N985/A/B		
1N992/A/B	1.05	.82
1N995	.30	.23
1N996	.30	.23
1N1081	.65	.51
1N1082	.70	.53
1N1083	.75	.57
1N1084	.80	.59
1N1085A	3.34	2.66
1N1086A	4.00	3.20
1N1087A	4.67	3.73
1N1088A	5.34	4.27
1N1089	3.34	2.66
1N1090	4.00	3.20
1N1091	4.67	3.73
1N1092	5.34	4.27
1N1095	.72	.48
1N1096	.91	.61
1N1100	.47	.31
1N1101	.52	.35
1N1102	.57	.39
1N1103	.62	.42
1N1104	.75	.53
1N1105	.90	.70
1N1108	2.30	1.85
1N1109	3.20	2.56
1N1110	4.10	3.30
1N1111	5.00	4.00
1N1112	5.90	4.70
1N1113	6.80	5.45
1N1115	1.19	.89
1N1116	1.25	.96
1N1117	1.40	1.02
1N1118	1.70	1.20
1N1119	1.80	1.33
1N1120	2.40	1.69
1N1124/A/R	2.31	1.60
1N1125/A/R	2.89	2.01
1N1126/A/R	4.04	2.85
1N1127/A/R	5.20	3.66
1N1128/A/R	6.14	4.33
1N1133	3.35	2.67
1N1134	3.35	2.67
1N1135	3.75	3.00
1N1136	3.75	3.00
1N1137	4.15	3.34
1N1138	4.15	3.34
1N1139	5.40	4.33
1N1140	5.40	4.33
1N1141	7.50	6.00
1N1142	7.50	6.00
1N1143/A	8.75	7.00
1N1144	10.00	8.00
1N1145	10.00	8.00
1N1146	10.85	8.66
1N1147	15.00	12.00
1N1148	17.10	13.65
1N1149	19.10	15.31
1N1150A	6.65	5.90
1N1169/A	.55	.40
1N1183/A/R	2.25	1.58
1N484/A/R	2.57	2.32
1N1185/A/R	3.26	2.43
1N1186/A/R	3.68	2.59
1N1187/A/R	5.15	3.58
1N1188/A/R	6.46	4.53
1N1189/A/R	7.77	5.41
1N1190/A/R	9.08	6.34
1N1191/A/R	1.57	1.04
1N1192/A/R	1.80	1.30
1N1193/A/R	2.00	1.55
1N1194/A/R	2.40	2.00
1N1195/A/R	3.90	2.97
1N1196/A/R	4.50	3.45
1N1197/A/R	5.70	3.00
1N1198/A/R	6.50	4.50
1N1199/A/R	1.20	.95
1N1200/A/R	1.30	.97
1N1201/A/R	1.60	1.15
1N1202/A/R	2.30	1.50
1N1203/A/R	3.20	2.20
1N1204/A/R	4.20	2.60
1N1205/A/R	4.90	3.05
1N1206/A/R	5.90	3.20
1N1217/A	1.01	.80
1N1218/A	1.01	.80
1N1219/A	1.05	.83
1N1220/A	1.05	.83
1N1221/A	1.20	.97
1N1222/A	1.25	1.00
1N1223/A	1.45	1.16
1N1224/A	1.50	1.19
1N1225/A	1.74	1.40
1N1226/A	1.80	1.44
1N1237	5.25	4.69
1N1238	5.25	4.69
1N1239	7.79	6.94
1N1262	9.50	8.65
1N1313/A thru 1N1327/A	2.95	2.10
1N1341/A/R	1.18	.83
1N1342/A/R	1.26	.88
1N1343/A/R	1.65	1.16
1N1344/A/R	2.26	1.60
1N1345/A/R	3.26	2.32
1N1346/A/R	4.25	2.98
1N1347/A/R	5.15	3.53
1N1348/A/R	6.14	4.31
1N1351/A thru 1N1375/A	3.00	2.40
1N1487	.51	.36
1N1488	.55	.38
1N1489	.62	.43
1N1490	.70	.48
1N1491	.79	.56
1N1492	1.00	.78
1N1507/A thru 1N1528/A	1.88	1.45
1N1530	9.75	7.50
1N1530A	14.30	11.00
1N1537	1.84	1.29
1N1538	2.42	1.71
1N1539	2.52	1.76
1N1540	2.73	1.93
1N1541	3.20	2.32
1N1542	4.20	2.98
1N1543	5.51	3.86
1N1544	6.67	4.68
1N1581	1.10	.78
1N1582	1.26	.88
1N1583	2.31	1.22
1N1584	2.63	1.82

SEMICONDUCTOR GUIDE

DEVICE	1-99	100-999
1N1585	3.89	2.76
1N1586	4.62	3.31
1N1587	5.15	3.80
1N1588/A thru 1N1598/A	2.60	2.10
1N1599/A thru 1N1609/A	3.20	2.55
1N1612/A/R	1.05	.79
1N1613/A/R	1.21	.89
1N1614/A/R	2.00	1.82
1N1615/A/R	3.94	3.36
1N1616/A/R	5.83	4.80
1N1617	2.30	1.85
1N1618	2.90	2.24
1N1619	3.50	2.67
1N1620	4.35	3.45
1N1621	2.30	1.85
1N1622	2.90	2.24
1N1623	3.50	2.67
1N1624	4.35	3.45
1N1627	.57	.43
1N1628	.65	.47
1N1629	.72	.54
1N1630	.77	.57
1N1631	.80	.59
1N1632	.88	.64
1N1633	.96	.69
1N1634	1.00	.72
1N1635	.68	.50
1N1636	.78	.58
1N1637	.84	.62
1N1638	.91	.67
1N1639	1.00	.72
1N1640	.85	.62
1N1641	.91	.67
1N1642	1.00	.72
1N1692	.47	.34
1N1693	.50	.36
1N1694	.59	.41
1N1695	.69	.48
1N1696	.76	.53
1N1697	.98	.68
1N1701	.56	.40
1N1702	.65	.45
1N1703	.70	.50
1N1704	.75	.55
1N1705	.90	.65
1N1706	1.40	1.00
1N1707	.56	.40
1N1708	.60	.43
1N1709	.68	.49
1N1710	.90	.55
1N1711	1.40	.80
1N1712	2.00	1.10
1N1730/A	2.68	2.37
1N1731/A	3.10	2.76
1N1732	4.31	3.86
1N1733	7.67	5.51
1N1734/A	10.29	8.27
1N1735	4.00	3.00
1N1736	5.50	4.00
1N1736A	6.60	4.75
1N1737	6.05	4.50
1N1737A	6.95	5.25
1N1738	7.30	5.75
1N1738A	9.20	6.75
1N1739	9.40	7.50
1N1739A	10.85	8.50
1N1740	11.20	9.80
1N1740A	12.40	10.50
1N1741	12.25	9.80
1N1741A	14.75	11.25
1N1742	13.25	10.25
1N1742A	15.90	12.80
	1-24	**25-99**
1N1745	4.15	3.05
1N1746	4.15	3.05
1N1747	4.33	3.17
1N1748	4.33	3.17
1N1749	4.50	3.31
1N1750	4.50	3.31
1N1751	6.53	4.80
1N1752	6.53	4.80
1N1753	7.02	5.16
1N1754	7.02	5.16
1N1755	7.44	5.47
1N1756	7.94	5.83
1N1757	9.05	6.66
1N1758	9.05	6.66
1N1759	9.31	6.85
1N1760	10.94	8.03
1N1761	11.91	8.76
1N1762	12.85	9.44
	1-99	**100-999**
1N1763/A	.49	.38
1N1764/A	.55	.42
1N1765 thru 1N1802	2.20	1.70
1N1765A thru 1N1802A	2.80	2.00

DEVICE	1-99	100-999
1N1803/A thru 1N1808/A	4.50	3.25
1N1809/A thru 1N1815/A	4.50	3.25
1N1816/A thru 1N1836/A	5.00	3.75
1N1875/A thru 1N1890/A	2.50	1.85
1N1956 thru 1N1965	2.00	1.60
1N1981/A thru 1N2002/A	4.10	2.75
1N2008/A thru 1N2021/A	4.50	3.25
1N2032 thru 1N2040	2.10	1.40
1N2032-1 thru 1N2040-3	2.40	1.70
1N2041/A thru 1N2049/A	4.00	3.00
	1-9	**10-99**
1N2054/R	20.48	13.23
1N2055/R	22.05	14.06
1N2056/R	24.15	15.16
1N2057/R	25.73	16.26
1N2058/R	27.30	17.37
1N2059/R	28.88	18.20
1N2060/R	30.45	19.30
1N2061/R	32.03	20.40
1N2062/R	33.60	21.50
1N2063/R	35.70	22.61
1N2064/R	39.90	25.36
1N2065/R	43.31	27.56
1N2066/R	46.73	29.49
1N2067/R	48.68	31.97
1N2068/R	55.13	34.73
	1-99	**100-999**
1N2069/A	.34	.30
1N2070/A	.43	.39
1N2071/A	.53	.48
1N2103	.53	.49
1N2104	.57	.53
1N2105	.63	.59
1N2106	.71	.66
1N2107	.80	.74
1N2108	.89	.83
1N2128A/R	3.78	2.87
1N2129A/R	3.99	2.98
1N2130A/R	4.73	3.51
1N2131A/R	5.30	3.90
1N2132A/R	5.88	4.37
1N2133/R	6.46	4.81
1N2134/R	7.04	5.23
1N2135/R	7.61	5.65
1N2136/R	8.24	6.12
1N2137/R	8.82	6.56
1N2138/R	9.98	7.39
1N2139	14.65	10.76
1N2154/R	2.50	1.76
1N2155/R	3.15	2.21
1N2156/R	4.62	3.20
1N2157/R	5.51	3.86
1N2158/R	6.20	4.36
1N2159/R	6.46	4.53
1N2160/R	6.62	4.63
1N2163/A	3.30	2.60
1N2164/A	4.15	3.30
1N2165/A	4.75	3.70
1N2166	4.80	3.75
1N2166A	5.95	4.75
1N2167	5.55	4.50
1N2167A	8.15	6.50
1N2168	8.10	6.24
1N2168A	10.80	8.32
1N2169	11.40	8.78
1N2169A	15.10	11.63
1N2170	16.00	12.32
1N2170A	24.90	19.17
1N2171	22.00	16.94
1N2171A	28.00	21.56
1N2348	1.84	1.38
1N2349	2.42	1.86
1N2350	2.68	2.14
1N2373	1.68	1.24
1N2374	1.76	1.30
1N2375	2.21	1.62
1N2376	2.90	2.33
1N2377	3.35	2.66
1N2378	4.20	3.34
1N2379	5.00	4.00
1N2380	7.10	5.66
1N2381	11.40	9.00
1N2382/A	4.15	3.05

DEVICE	1-99	100-999
1N2383/A	6.00	4.41
1N2384/A	7.23	5.31
1N2385/A	8.38	6.16
1N2389	4.73	4.73
1N2482	.35	.27
1N2483	.38	.32
1N2484	.45	.34
1N2485	.47	.35
1N2486	.50	.36
1N2487	.57	.43
1N2488	.60	.47
1N2489	.65	.50
1N2490	7.88	7.88
1N2498/A thru 1N2500/A	2.90	2.28
1N2498C thru 1N2500C	5.25	4.00
1N2610	.58	.44
1N2611	.65	.49
1N2612	.74	.56
1N2613	.83	.62
1N2614	.93	.69
1N2615	1.05	.78
1N2616	1.58	1.10
1N2617	3.94	3.14
1N2620	2.12	1.70
1N2620A	2.45	1.95
1N2620B	2.70	2.16
1N2621	2.55	2.04
1N2621A	3.20	2.55
1N2621B	4.00	3.20
1N2622	4.25	3.40
1N2622A	4.65	3.70
1N2622B	4.90	3.90
1N2623	5.10	3.92
1N2623A	6.10	4.70
1N2623B	8.10	6.24
1N2624	12.50	9.62
1N2624A	16.00	12.32
1N2624B	22.00	16.94
1N2630	7.35	7.35
1N2631	5.25	5.25
1N2632	7.88	7.88
1N2633	5.25	5.25
1N2634	6.30	6.30
1N2635	7.35	7.35
1N2636	6.30	6.30
1N2637	9.45	9.45
1N2765	3.10	2.00
1N2765A	4.00	3.08
1N2766	4.20	3.23
1N2766A	5.50	4.24
1N2767	5.80	4.46
1N2767A	6.50	5.00
1N2768	6.90	5.50
1N2768A	9.05	6.96
1N2769	8.65	6.90
1N2769A	10.95	8.43
1N2770	9.90	7.90
1N2770A	12.75	10.20
1N2804 thru 1N2837	4.99	3.50
1N2804A thru 1N2837A	6.72	5.20
1N2804B thru 1N2837B	7.00	5.75
1N2838 thru 1N2846	4.85	3.46
1N2838A thru 1N2846A	6.70	4.90
1N2838B thru 1N2846B	7.60	5.55
1N2858	.35	.28
1N2859	.38	.29
1N2860	.39	.30
1N2861	.47	.39
1N2862	.53	.43
1N2863	.60	.49
1N2864	.66	.54
1N2927	12.65	11.25
1N2927A	15.00	13.40
1N2928	10.70	9.40
1N2928A	14.65	13.20
1N2929	9.35	8.15
1N2929A	14.65	13.20
1N2930	9.35	8.15
1N2930A	14.65	13.20
1N2931	9.35	8.15
1N2931A	14.65	13.20
1N2932	9.35	8.15
1N2932A	17.65	15.60
1N2933	9.35	8.15
1N2933A	20.00	17.50
1N2934	16.00	14.05
1N2934A	22.75	20.30
1N2937	3.95	3.05

DEVICE	1-99	100-999
1N2970/A/B 1N3004/A/B	3.50	2.90
1N3005/A/B thru 1N3015/A/B	4.25	3.30
1N3016/A/B 1N3051/A/B	1.75	1.30
1N3062	.28	.18
1N3063	.18	.12
1N3064	.18	.12
1N3065	.43	.28
1N3066	.43	.28
1N3070	.90	.67
1N3071	.30	.20
1N3085	15.23	9.60
1N3086	16.80	10.58
1N3087	17.85	11.25
1N3088	19.11	12.02
1N3089	20.37	12.79
1N3090	22.58	14.23
1N3091	26.25	16.54
1N3092	33.08	20.84
1N3111	7.35	6.62
1N3112	4.00	3.20
1N3125	.32	.28
1N3154	2.12	1.07
1N3154A	2.92	1.47
1N3155	2.87	1.42
1N3155A	3.52	2.77
1N3156	4.92	2.47
1N3156A	5.72	2.87
1N3157	6.12	3.07
1N3157A	8.92	4.47
1N3161	21.00	13.23
1N3162	22.05	14.06
1N3163	24.15	15.16
1N3164	25.73	16.26
1N3165	27.30	17.09
1N3166	28.88	18.20
1N3167	30.45	19.30
1N3168	32.03	20.40
1N3169	35.70	22.61
1N3170	39.90	25.36
1N3171/A	42.53	26.73
1N3172/A	46.73	29.49
1N3173/A	50.93	31.97
1N3174/A	55.13	34.73
1N3175	58.00	40.00
1N3182	.43	.32
1N3189	.90	.65
1N3190	1.10	.80
1N3191	1.75	1.20
1N3193	.35	.26
1N3194	.38	.28
1N3195	.53	.39
1N3196	.74	.54
1N3199	2.65	2.05
1N3200	3.05	2.35
1N3201	3.25	2.55
1N3202	5.50	4.35
1N3208	1.60	1.15
1N3209	1.65	1.20
1N3210	1.89	1.32
1N3211	2.26	1.71
1N3212	2.68	1.98
1N3213	3.57	2.64
1N3214	4.10	3.07
1N3223	2.00	1.33
1N3253	.38	.28
1N3254	.42	.30
1N3255	.56	.41
1N3256	.78	.57
1N3260	16.10	11.00
1N3261	17.05	12.00
1N3262	18.00	13.00
1N3263	19.50	14.00
1N3264	20.80	14.50
1N3265	22.10	15.00
1N3266	23.20	15.50
1N3267	24.70	16.00
1N3268	27.50	18.00
1N3269	31.00	20.00
1N3270	33.00	22.00
1N3271	35.60	22.50
1N3272	39.00	24.75
1N3273	43.00	27.50
1N3274	49.20	43.00
1N3277	.40	.27
1N3287	.56	.40
1N3288/A	13.65	8.82
1N3289/A	15.23	9.65
1N3290/A	16.28	10.40
1N3291/A	17.33	11.03
1N3292/A	18.38	11.58
1N3293/A	20.48	12.96
1N3294/A	25.20	15.99
1N3295/A	29.93	19.02
1N3296/A	34.13	21.50
1N3305/A/B 1N3340/A/B	7.00	5.50
1N3341/A/B 1N3350/A/B	8.00	6.00
1N3477/A	1.75	1.35
1N3491	.81	.59
1N3492	.89	.68

SEMICONDUCTOR GUIDE

DEVICE	1-99	100-999
1N3493	1.27	.92
1N3494	1.41	1.03
1N3495	1.65	1.18
1N3496	1.60	1.07
1N3497	2.03	1.35
1N3498	4.15	2.77
1N3499	11.00	7.33
1N3500	1.57	.88
1N3501	15.97	8.02
1N3502	17.07	8.52
1N3503	17.07	8.52
1N3504	19.67	10.62
1N3506		
thru		
1N3520	1.52	.77
1N3521		
thru		
1N3534	1.52	.77
1N3537	3.05	2.30
1N3550	.66	.40
1N3563	1.99	1.42
1N3569	1.33	.93
1N3570	1.65	1.16
1N3571	2.21	1.54
1N3572	2.68	1.88
1N3573	3.99	2.81
1N3574	5.72	4.02
1N3580	2.60	2.00
1N3580A	3.00	2.35
1N3580B	3.40	2.75
1N3581	3.10	2.40
1N3581A	3.65	2.85
1N3581B	4.55	3.60
1N3582	4.95	3.90
1N3582A	5.55	4.35
1N3582B	6.20	4.85
1N3583	6.60	5.20
1N3583A	7.45	5.85
1N3583B	10.05	8.00
1N3584	16.20	12.85
1N3584A	20.70	16.45
1N3584B	23.30	18.30
1N3592	.54	.42
1N3600	.60	.40
1N3604	.60	.40
1N3605	.55	.38
1N3606	.55	.38
1N3611	.72	.60
1N3612	.99	.84
1N3613	1.48	1.15
1N3614	2.01	1.68
1N3615	1.42	1.04
1N3616	1.58	1.10
1N3617	2.05	1.49
1N3618	3.15	2.21
1N3619	4.10	2.76
1N3620	4.99	3.36
1N3621	5.78	3.86
1N3622	7.04	4.66
1N3623	9.45	6.34
1N3624	11.24	7.50
1N3639	.58	.40
1N3640	.74	.49
1N3641	1.05	.71
1N3642	1.47	1.00
1N3643	1.25	1.15
1N3644	1.55	1.40
1N3645	2.10	1.85
1N3646	3.75	3.30
1N3647	4.50	4.00
1N3649	11.66	8.27
1N3650	14.44	9.92
1N3666	.69	.51
1N3669	.60	.41
1N3670/A	7.87	5.25
1N3671/A	8.77	5.85
1N3672/A	9.45	6.30
1N3673/A	9.90	6.60
1N3675/A/B		
1N3710/A/B	.72	.55
1N3712	3.96	2.64
1N3713	6.00	3.96
1N3714	3.48	2.33
1N3715	5.51	3.65
1N3716	2.48	1.65
1N3717	4.68	3.11
1N3718	3.01	2.01
1N3719	4.68	3.11
1N3720	4.00	2.66
1N3721	4.68	3.11
1N3731	.85	.52
	1-9	10-99
1N3735	22.05	14.06
1N3736	25.73	316.26
1N3738	28.88	18.20
1N3739	32.03	20.40
1N3740	35.70	22.61
1N3741	39.90	25.36
1N3742	46.73	29.49
1N3743	55.13	34.73
1N3744	64.05	40.52

DEVICE	1-99	100-999
1N3763	16.40	13.00
1N3765	9.45	6.62
1N3766	10.20	7.17
1N3767	11.29	7.83
1N3768	12.18	8.55
1N3779	5.00	3.71
1N3780	6.30	4.71
1N3781	8.40	6.33
1N3782	12.00	9.10
1N3783	17.00	12.95
1N3784	29.50	22.95
13785/A		
thru		
1N3812/A	3.35	2.50
1N3785/B		
thru		
1N3812/B	4.35	3.27
1N3813		
thru		
1N3820	2.80	2.17
1N3813A		
thru		
1N3820A	4.10	3.08
1N3813B		
thru		
1N3820B	5.55	4.19
1N3821/A		
thru		
1N3830/A	1.65	1.22
1N3879	2.55	1.70
1N3880	2.93	1.95
1N3881	3.75	2.50
1N3882	4.50	3.00
1N3883	5.25	3.50
1N3889	3.15	2.10
1N3890	3.75	2.50
1N3891	4.72	3.15
1N3892	5.70	3.80
1N3893	6.75	4.50
1N3899	4.50	3.00
1N3900	5.25	3.50
1N3901	6.75	4.50
1N3902	8.25	5.50
1N3903	9.90	6.60
1N3909	5.10	3.40
1N3910	6.00	4.00
1N3911	7.80	5.20
1N3912	9.60	6.40
1N3913	11.40	7.60
1N3949	5.50	4.25
1N3950	4.35	3.27
1N3951	4.35	3.27
1N3984		
thru		
1N3986	3.05	2.35
1N3987	8.25	5.50
1N3988	8.76	5.84
1N3989	9.44	6.29
1N3990	10.80	7.20
1N3993/A		
thru		
1N4000/A	4.40	3.33
1N4001	.45	.30
1N4002	.46	.307
1N4003	.47	.313
1N4004	.48	.32
1N4005	.50	.333
1N4006	.60	.40
1N4007	.66	.44
1N4008	.43	.32
1N4009	.23	.15
1N4010	3.87	2.90
1N4012	6.50	4.50
1N4013	6.75	4.70
1N4014	7.25	5.00
1N4015	8.00	5.35
1N4016		
thru		
1N4042	2.80	2.10
1N4016A		
thru		
1N4042A	3.55	2.65
1N4016B		
thru		
1N4042B	4.50	3.35
1N4044	16.80	11.03
1N4045	18.90	12.13
1N4046	19.95	12.96
1N4047	22.05	13.79
1N4048	23.63	14.89
1N4049	25.20	15.99
1N4050	31.50	19.85
1N4051	35.18	22.05
1N4052	38.85	24.26
1N4053	42.00	26.46
1N4054	46.20	29.22
1N4055	50.40	31.97
1N4056	54.60	34.18
1N4057/A	5.50	4.25
1N4058/A	6.15	4.75
1N4059/A	6.45	5.00
1N4060/A	7.05	5.50

DEVICE	1-99	100-999
1N4061/A	8.95	7.00
1N4062/A	9.70	7.50
1N4063/A	10.75	8.45
1N4064/A	11.10	8.75
1N4065/A	11.50	9.05
1N4066/A	11.75	9.25
1N4067/A	12.35	9.75
1N4068/A	12.70	10.00
1N4069/A	16.10	12.75
1N4070/A	19.15	15.15
1N4071/A	20.80	16.75
1N4072/A	22.70	18.00
1N4073/A	23.60	18.75
1N4074/A	28.10	22.35
1N4075/A	28.30	22.35
1N4076/A	29.30	23.35
1N4077/A	32.90	26.00
1N4078/A	33.30	26.30
1N4079/A	35.70	28.75
1N4080/A	39.10	31.00
1N4081/A	40.60	32.25
1N4082/A	45.10	35.75
1N4083/A	48.25	38.25
1N4084/A	54.20	43.00
1N4085/A	61.75	49.60
1N4086	.30	.23
1N4087	.30	.23
1N4090	3.35	2.20
1N4092	.30	.23
1N4093	.30	.23
1N4095	1.75	1.35
1N4099		
thru		
1N4106	1.62	.77
1N4107		
thru		
1N4112	1.62	.77
1N4113		
thru		
1N4123	1.62	.77
1N4136	5.30	3.90
1N4137	7.61	5.65
1N4138	9.45	6.78
1N4147	.30	.20
1N4148	.30	.20
1N4149	.30	.20
1N4150	.40	.25
1N4151	.30	.24
1N4152	.30	.24
1N4153	.30	.24
1N4154	.36	.28
1N4156	.75	.50
1N4157	1.04	.69
1N4158/A		
thru		
1N4193/A	1.55	1.22
1N4240	10.80	8.52
1N4241	10.80	8.52
1N4245	.38	.29
1N4246	.45	.35
1N4247	.59	.46
1N4248	.97	.65
1N4249	1.12	.75
1N4295	2.75	2.30
1N4295A	4.05	3.20
1N4296	3.65	2.75
1N4296A	4.75	3.60
1N4297	6.25	4.90
1N4297A	6.85	5.40
1N4297B	8.45	6.60
1N4298	10.05	7.65
1N4298A	10.75	8.14
1N4298B	11.75	8.91
1N4299	7.25	5.50
1N4299A	7.95	6.04
1N4299B	8.90	6.87
1N4300	12.25	9.30
1N4300A	12.75	9.68
1N4300B	13.75	10.45
1N4301	8.80	6.70
1N4301A	10.85	7.85
1N4301B	12.55	9.53
1N4302	14.00	10.65
1N4302A	14.75	11.22
1N4302B	16.75	12.76
1N4303	10.05	7.65
1N4303A	11.50	8.77
1N4303B	13.75	10.45
1N4304	16.25	12.37
1N4304A	17.75	13.53
1N4304B	19.25	14.69
1N4305	.60	.40
1N4370		
thru		
1N4372	1.05	.88
1N4370A		
thru		
1N4372A	1.16	.93
1N4383	.40	.31
1N4384	.52	.35
1N4385	.73	.50
1N4393	7.50	6.75

DEVICE	1-99	100-999
1N4393A	10.00	9.00
1N4394	7.50	6.75
1N4394A	10.00	9.00
1N4395	7.50	6.75
1N4395A	10.00	9.00
1N4396	7.50	6.75
1N4396A	10.00	9.00
1N4396B	14.80	13.25
1N4397	7.50	6.75
1N4397A	10.00	9.00
1N4397B	14.80	13.25
1N4398	7.50	6.75
1N4398A	10.00	9.00
1N4398B	14.80	13.25
1N4399	7.50	6.75
1N4399A	10.00	9.00
1N4399B	14.80	13.25
1N4444	1.51	.99
1N4446	.36	.24
1N4447	.45	.30
1N4448	.45	.30
1N4449	.45	.30
1N4450	.60	.45
1N4451	.60	.45
1N4453	.40	.28
1N4454	.40	.28
1N4459	11.40	7.60
1N4460		
thru		
1N4496	.65	.50
1N4510	11.80	7.45
1N4511	14.40	9.60
1N4524	.35	.28
1N4529	13.50	9.00
1N4530	17.25	11.50
1N4531	.45	.30
1N4532	.45	.30
1N4533	.69	.46
1N4534	1.00	.67
1N4535	1.40	1.02
1N4536	.42	.28
1N4549		
thru		
1N4556	5.15	3.88
1N4594A		
thru		
1N4556A	6.40	4.85
1N4549B		
thru		
1N4556B	8.85	6.68
1N4557		
thru		
1N4564	4.99	4.58
1N4557A		
thru		
1N4564A	6.72	6.23
1N4557B		
thru	29.19	8.72
1N4564B		
1N4565	4.70	3.65
1N4565A	5.00	3.90
1N4566	6.05	4.58
1N4566A	6.55	4.96
1N4567	8.00	6.03
1N4567A	9.25	6.99
1N4568	24.30	19.90
1N4568A	28.25	23.20
1N4569	54.00	44.55
1N4569A	57.50	47.60
1N4570	4.35	3.27
1N4570A	4.85	3.65
1N4571	5.25	3.96
1N4571A	5.75	4.29
1N4572	6.00	4.49
1N4572A	6.70	4.82
1N4573	15.70	12.75
14573A	16.80	13.60
1N4574	37.10	31.00
1N4574A	42.90	35.40
1N4575	1.75	1.37
1N4575A	2.00	1.56
1N4576	2.40	1.79
1N4576A	2.70	2.02
1N4577	3.45	2.60
1N4577A	4.15	3.14
1N4578	7.45	5.50
1N4578A	8.00	5.93
1N4579	19.35	15.15
1N4579A	21.75	17.10
1N4580	1.85	1.37
1N4580A	2.10	1.56
1N4581	2.30	1.74
1N4581A	2.70	2.02
1N4582	3.55	2.65
1N4582A	4.15	3.14
1N4583	8.00	6.03
1N4583A	9.25	6.99
1N4584	18.20	14.25
1N4584A	20.65	16.20
1N4585	1.00	.79
1N4586	1.65	1.25
1N4587	15.23	9.60

SEMICONDUCTOR GUIDE

DEVICE	1-99	100-999
1N4588	16.80	11.00
1N4589	17.85	13.30
1N4590	19.11	14.50
1N4591	20.37	15.00
1N4592	2.58	16.00
1N4593	26.25	17.00
1N4594	33.08	19.00
1N4595	37.80	24.00
1N4596	28.56	23.43
1N4606	.54	.40
1N4607	.90	.67
1N4608	.54	.40
1N4610	.54	.40
1N4612	3.65	2.75
1N4613	3.65	2.75
1N4614		
thru		
1N4627	2.65	2.05
1N4628		
thru		
1N4648	1.75	1.35
1N4678		
thru		
1N4717	1.80	1.40
1N4727	.40	.26
1N4728/A		
thru		
1N4764/A	.75	.60
1N4765	8.65	7.70
1N4765A	9.70	8.65
1N4766	11.70	10.40
1N4766A	13.05	11.60
1N4767	23.80	21.20
1N4767A	26.45	23.50
1N4768	41.10	36.40
1N4768A	45.75	40.50
1N4769	89.50	79.50
1N4769A	99.50	88.50
1N4770	5.80	5.20
1N4770A	6.50	5.80
1N4771	7.30	6.50
1N4771A	8.10	7.20
1N4772	13.25	11.75
1N4772A	14.75	13.10
1N4773	24.25	21.60
1N4773A	27.00	22.60
1N4774	56.50	50.25
1N4774A	63.15	56.00
1N4775	8.65	7.70
1N4775A	9.70	8.55
1N4776	11.70	10.40
1N4776A	13.05	11.60
1N4777	23.80	21.20
1N4777A	26.45	23.50
1N4778	41.10	36.40
1N4778A	45.75	40.50
1N4779	89.50	79.50
1N4779A	99.50	88.50
1N4780	5.80	5.20
1N4780A	6.50	5.80
1N4781	7.30	6.50
1N4781A	8.10	7.20
1N4782	13.25	11.75
1N4782A	14.75	13.10
1N4783	24.25	21.60
1N4783A	27.00	22.60
1N4784	56.50	50.25
1N4784A	63.15	56.00
1N4816	.27	.24
1N4817	.31	.28
1N4818	.37	.32
1N4819	.42	.38
1N4820	.46	.41
1N4821	.50	.44
1N4822	.56	.50
1N4828	.45	.30
1N4829	.69	.46
1N4830	.93	.62
1N4831/A/B		
1N4860/A/B	2.15	1.60
1N4863	1.02	.68
1N4864	1.37	.91
	1-24	**25-99**
1N4865	7.68	6.15
1N4866	9.70	7.63
1N4867	9.85	7.73
1N4868	13.41	10.36
1N4869	18.71	14.24
1N4870	24.18	18.28
1N4871	27.88	21.00
1N4872	35.06	26.04
1N4873	45.29	33.56
1N4874	56.35	40.95
1N4875	67.12	48.86
1N4876	85.06	64.53
1N4877	105.88	80.83
1N4878	157.00	120.45
	1-99	**100-999**
1N4938	.85	.38
1N4942	.96	.82
1N4943	1.22	1.03

DEVICE	1-99	100-999
1N4944	1.34	1.13
1N4945	2.34	1.96
1N4946	2.59	2.17
1N4947	4.89	4.12
1N4948	7.75	6.48
1N4951	.36	.24
1N4952	.41	.27
1N4954		
thru		
1N4989	3.75	3.25
1N5008/A		
thru		
1N5051/A	1.75	1.35
1N5052	.79	.56
1N5053	.84	.62
1N5054	.95	.70
1N5059	.36	.28
1N5060	.43	.33
1N5061	.57	.40
1N5062	.80	.53
1N5063/A		
thru		
1N5104/A	1.30	.95
1N5118		
thru		
1N5128	3.75	3.25
1N5162	57.75	46.10
1N5179	1.32	.88
1N5181	4.20	3.75
1N5182	5.25	4.65
1N5183	11.25	10.00
1N5184	15.40	13.65
1N5211	.38	.28
1N5212	.42	.30
1N5213	.56	.41
1N5214	.81	.59
1N5215	.42	.30
1N5216	.45	.33
1N5217	.60	.44
1N5218	.85	.62
1N5221/A/B		
1N5281/A/B	.87	.58
1N5282	1.65	1.20
1N5315	.35	.27
1N5316	.35	.27
1N5317	.28	.20
1N5318	.54	.40
1N5319	.21	.16
1N5331	10.50	7.00
1N5332	12.60	8.40
1N5333/A/B		
1N5388/A/B	2.30	1.85
1N5391	.27	.20
1N5392	.30	.22
1N5393	.33	.24
1N5394	.35	.26
1N5395	.37	.27
1N5396	.43	.32
1N5397	.52	.38
1N5398	.73	.53
1N5399	.93	.68
1N5415	1.35	1.12
1N5416	1.45	1.19
1N5417	1.81	1.49
1N5418	3.02	2.45
1N5419	4.47	3.64
1N5550	.93	.77
1N5551	1.21	.99
1N5552	1.82	1.49
1N5553	2.61	2.20
1N5554	3.64	2.97
1N5555		
thru		
1N5557	4.50	3.60
1N5558	5.85	4.70
1N5559/A/B		
1N5594/A/B	.95	.75
1N5614	.43	.36
1N5615	.86	.72
1N5616	.59	.51
1N5617	1.24	1.03
1N5618	.89	.75
1N5619	2.49	2.07
1N5620	1.22	1.02
1N5621	4.79	4.02
1N5622	1.91	1.58
1N5623	7.65	6.38
1N5624	.75	.50
1N5625	1.00	.67
1N5626	1.40	.95
1N5627	3.75	2.50
1N5629		
thru		
1N5656	3.95	3.25
1N5629A		
thru		
1N5656A	4.50	3.70
1N5657		
thru		
1N5665	5.15	4.27
1N5657A		
thru		
1N5665A	5.85	4.85

DEVICE	1-99	100-999
2N128	6.60	5.20
2N231	1.20	1.05
2N240	5.90	4.85
2N319	.88	.65
2N320	.74	.55
2N321	.81	.60
2N322	.81	.60
2N323	.70	.50
2N324	.83	.55
2N344	7.75	6.00
2N345	4.55	3.70
2N346	6.15	5.00
2N393	4.75	3.70
2N461	2.40	1.60
2N489	7.10	4.75
2N489A	7.65	5.10
2N489B	9.15	6.10
2N490	7.80	5.20
2N490A	8.35	5.55
2N490B	9.85	6.55
2N490C	11.85	7.90
2N491	8.40	5.60
2N491A	8.90	5.95
2N491B	10.40	6.95
2N492	9.90	6.60
2N492A	10.40	6.95
2N492B	11.90	7.95
2N492C	13.90	9.28
2N493	10.75	7.20
2N493A	11.20	7.50
2N493B	12.75	8.50
2N494	10.90	7.30
2N494A	11.40	7.60
2N494B	12.90	8.60
2N494C	14.95	9.95
2N495	11.60	9.30
2N496	11.60	9.30
2N499	4.35	3.65
2N499A	5.30	4.20
2N501	6.95	5.60
2N501A	7.75	6.15
2N502	3.30	2.70
2N502A	3.95	3.05
2N502B	4.30	3.50
2N503	2.55	2.10
2N504	3.45	2.80
2N508	.81	.60
2N508A	1.08	.70
2N524	1.35	.93
2N525	1.10	.73
2N526	1.25	.83
2N527	1.37	.92
2N545	15.60	12.00
2N546	9.10	7.00
2N547	5.20	4.00
2N548	3.25	2.50
2N549	3.90	3.00
2N550	2.60	2.00
2N588	1.45	1.20
2N588A	1.58	1.30
2N681	2.34	1.70
2N682	2.82	2.05
2N683	3.57	2.60
2N684	4.19	3.05
2N685	4.81	3.50
2N686	5.36	3.90
2N687	5.77	4.20
2N688	6.74	4.90
2N689	8.05	5.85
2N690	8.67	6.30
2N691	15.21	11.69
2N692	20.11	15.82
2N696	.63	.42
2N697	.63	.42
2N698	.68	.45
2N699	.68	.45
2N706	.38	.25
2N708	.43	.28
2N718	.45	.30
2N718A	.48	.32
2N720	.50	.33
2N720A	.53	.35
2N753	.57	.35
2N760	.43	.28
2N760A	.45	.30
2N779A	3.50	2.95
2N794	6.45	4.85
2N795	4.45	3.25
2N796	4.10	3.05
2N846A	5.40	4.35
2N858	8.70	7.05
2N859	9.35	7.65
2N860	8.40	6.80
2N861	6.00	4.80
2N862	6.65	5.45
2N863	4.50	3.65
2N864	5.70	4.70
2N865	8.25	6.65
2N877	3.00	2.00
2N878	3.30	2.20
2N879	5.40	3.60
2N880	6.30	4.20
2N881	7.50	5.00

DEVICE	1-99	100-999
2N885	8.62	5.75
2N886	10.50	7.00
2N887	13.12	8.75
2N888	14.77	9.85
2N910	.50	.33
2N911	.50	.33
2N915	.38	.25
2N915A	.38	.25
2N916	.38	.25
2N917	.48	.32
2N918	.48	.32
2N929	.40	.27
2N929A	.43	.28
2N930	.40	.27
2N979	2.35	1.96
2N980	2.30	1.80
2N982	2.25	1.75
2N983	2.40	1.85
2N984	2.30	1.85
2N1052	13.00	10.00
2N0154	5.20	4.00
2N1055	10.40	8.00
2N1116	5.07	3.90
2N1117	5.20	4.00
2N1118	10.60	8.55
2N1118A	14.85	12.20
2N1119	10.60	8.60
2N1122	6.00	4.85
2N1122A	7.40	6.00
2N1175	1.16	.77
2N1208	15.60	12.00
2N1209	15.60	12.00
2N1212	13.00	10.00
2N1300	5.35	3.95
2N1301	5.35	3.95
2N1370	.72	.48
2N1371	1.14	.76
2N1372	.82	.54
2N1373	1.20	.80
2N1374	1.02	.68
2N1375	1.39	.92
2N1376	1.29	.86
2N1377	1.50	1.00
2N1378	1.29	.86
2N1379	1.44	.96
2N1380	.67	.44
2N1381	.79	.53
2N1411	4.05	3.25
2N1413	1.20	.83
2N1414	.95	.64
2N1415	1.10	.73
2N1427	5.00	3.95
2N1429	8.75	7.05
2N1469	2.25	1.65
2N1469A	2.35	1.75
2N1479	1.12	.82
2N1480	1.30	.95
2N1481	1.30	.95
2N1482	1.47	1.07
2N1483	1.73	1.26
2N1484	1.91	1.39
2N1485	1.91	1.39
2N1486	2.08	1.51
2N1487	2.16	1.58
2N1488	2.26	1.64
2N1489	2.26	1.64
2N1490	2.60	1.89
2N1491	1.82	1.32
2N1492	4.29	3.12
2N1493	7.01	5.10
2N1499A	2.40	1.85
2N1499B	2.65	1.90
2N1500	6.95	5.30
2N1595/A	1.82	1.27
2N1596/A	2.27	1.59
2N1597/A	2.72	1.91
2N1598/A	3.17	2.22
2N1599/A	3.62	2.54
2N1600	5.15	3.68
2N1601	5.46	4.08
2N1602	7.14	5.34
2N1603	8.03	6.01
2N1604	8.82	6.62
2N1613	.63	.42
2N1616	20.15	15.50
2N1616A	28.60	22.00
2N1617	22.75	17.50
2N1617A	26.00	20.00
2N1618	27.30	21.80
2N1618A	30.55	23.50
2N1647	14.95	11.50
2N1648	17.42	13.40
2N1649	16.90	13.90
2N1650	19.50	15.00
2N1671	2.95	1.97
2N1671A	3.20	2.13
2N1671B	3.55	2.36
2N1671C	8.25	5.50
2N1676	11.70	9.40
2N1677	8.85	7.20
2N1700	1.90	1.38
2N1701	2.31	1.68
2N1702	4.54	3.30

SEMICONDUCTOR GUIDE

DEVICE	1-99	100-999
2N1711	.78	.56
2N1714	5.20	4.20
2N1715	6.83	5.65
2N1716	6.18	5.00
2N1717	9.43	7.75
2N1724	23.40	18.75
2N1724A	26.65	21.50
2N1726	1.15	.95
2N1727	1.00	.85
2N1728	1.55	1.15
2N1742	2.93	2.35
2N1743	2.87	2.32
2N1744	2.25	1.95
2N1745	2.85	2.10
2N1746	1.70	1.20
2N1747	2.40	1.60
2N1748	1.65	1.10
2N1749	1.75	1.30
2N1752	1.70	1.25
2N1754	1.65	1.20
2N1770	1.95	1.30
2N1770A	2.47	1.65
2N1771	2.17	1.45
2N1771A	2.70	1.80
2N1772	3.00	2.00
2N1772A	3.60	2.40
2N1773	4.35	2.90
2N1773A	5.25	3.50
2N1774	5.40	3.60
2N1774A	6.45	4.30
2N1775	6.37	4.25
2N1775A	7.57	5.05
2N1776	7.12	4.75
2N1776A	8.47	5.65
2N1777	7.87	5.25
2N1777A	9.45	6.30
2N1778	9.75	6.50
2N1785	1.70	1.25
2N1786	1.55	1.20
2N1787	1.65	1.20
2N1788	1.40	1.25
2N1789	1.55	1.05
	1-9	10-99
2N1792	18.00	10.75
2N1793	19.50	11.75
2N1794	21.50	13.00
2N1795	23.50	14.00
2N1796	26.00	15.75
2N1797	27.50	16.50
2N1798	32.00	19.25
2N1799	46.20	29.22
2N1800	54.60	34.18
2N1801	68.25	43.00
2N1802	80.85	51.27
2N1803	92.40	58.99
2N1804	115.50	71.66
2N1805	46.20	29.22
2N1806	54.60	34.18
2N1807	68.25	43.00
	1-99	100-999
2N1842/A	2.38	1.70
2N1843/A	2.73	1.95
2N1844/A	3.43	2.45
2N1845/A	4.06	2.90
2N1846/A	4.62	3.30
2N1847/A	5.18	3.70
2N1848/A	5.60	4.00
2N1849/A	6.50	4.65
2N1850/A	7.28	5.20
2N1866	9.56	7.85
2N1889	.68	.45
2N1890	.68	.45
2N1893	.68	.45
	1-9	10-99
2N1909	16.50	10.00
2N1910	18.00	10.75
2N1911	19.50	11.75
2N1912	21.50	13.00
2N1913	23.50	14.00
2N1914	26.00	15.75
2N1915	27.50	16.50
2N1916	32.00	19.25
	1-99	100-999
2N1924	1.68	1.12
2N1925	1.89	1.25
2N1926	2.27	1.51
2N2015	9.08	6.60
2N2016	9.90	7.20
2N2018	20.80	16.50
2N2019	24.37	19.25
	1-9	10-99
2N2023	22.00	13.25
2N2024	28.50	17.25
2N2025	32.50	19.50
2N2026	35.00	21.00
2N2027	35.00	21.00
2N2028	36.00	21.00

DEVICE	1-9	10-99
2N2029	37.00	22.75
2N2030	40.00	24.00
2N2031	30.50	18.25
	1-99	100-999
2N2048	1.95	1.60
2N2060	4.13	2.75
2N2060A	6.50	4.33
2N2060B	7.13	4.75
2N2102	1.22	.89
2N2150	15.60	12.00
2N2151	18.20	14.00
2N2160	1.49	.99
2N2162	8.00	6.55
2N2163	6.65	5.45
2N2164	7.40	6.10
2N2165	5.70	4.70
2N2166	4.35	3.55
2N2167	5.05	4.15
2N2168	5.60	4.50
2N2169	4.15	3.35
2N2170	2.35	1.95
2N2185	15.00	12.00
2N2186	30.60	24.45
2N2187	31.50	25.10
2N2192	.70	.47
2N2193	.68	.45
2N2194	.68	.45
2N2195	.65	.43
2N2199	6.75	4.95
2N2200	6.80	5.00
2N2217	.60	.40
2N2218/A	.55	.37
2N2219/A	.58	.38
2N2220	.43	.28
2N2221/A	.40	.27
2N2222/A	.40	.27
2N2223/A	4.13	2.75
2N2270	.68	.49
2N2274	9.45	7.60
2N2275	20.45	16.50
2N2276	6.36	5.10
2N2277	12.40	10.00
2N2278	11.35	9.10
2N2279	24.35	19.50
2N2280	4.20	3.40
2N2281	9.50	7.60
2N2304	4.29	3.12
2N2305	6.44	4.68
2N2322	2.17	1.18
2N2322A	2.25	1.50
2N2323	1.95	1.30
2N2323A	2.55	1.70
2N2324	3.08	2.05
2N2324A	4.20	2.80
2N2325	4.53	3.02
2N2325A	6.00	4.00
2N2326	5.82	3.88
2N2326A	8.00	5.20
2N2327	6.90	4.60
2N2327A	11.10	7.40
2N2328	8.40	5.60
2N2328A	12.00	8.00
2N2329	11.10	7.40
2N2338	6.60	4.80
2N2344	3.45	2.30
2N2345	3.90	2.60
2N2346	5.10	3.40
2N2347	9.15	6.10
2N2348	12.00	8.00
2N2360	3.95	3.05
2N2361	3.30	2.45
2N2362	2.10	1.75
2N2368	.43	.28
2N2369/A	.45	.28
2N2377	11.15	9.05
2N2378	11.15	9.05
2N2386	1.80	1.50
2N2386A	2.75	1.70
2N2398	3.90	3.25
2N2399	3.35	2.70
2N2400	3.25	2.80
2N2401	3.50	3.05
2N2402	3.60	3.15
2N2405	1.78	1.30
2N2417	7.10	4.75
2N2417A	7.65	5.10
2N2417B	9.15	6.10
2N2418	7.80	5.20
2N2418A	8.35	5.55
2N2418B	9.85	6.55
2N2419	8.40	5.60
2N2419A	8.90	5.95
2N2419B	10.40	6.95
2N2420	9.80	6.55
2N2420A	10.40	6.95
2N2420B	11.90	7.95
2N2421	10.75	7.20
2N2421A	11.20	7.50
2N2421B	12.75	8.50
2N2422	10.90	7.30
2N2422A	11.40	7.60

DEVICE	1-99	100-999
2N2422B	12.90	8.60
2N2451	4.85	4.05
2N2453	3.50	2.33
2N2453A	3.80	2.53
2N2480	4.63	3.08
2N2480A	5.38	3.58
2N2483	.40	.27
2N2484	.40	.27
2N2484A	1.40	.93
2N2488	2.95	2.40
2N2489	3.65	3.10
2N2497	2.10	1.70
2N2498	1.95	1.55
2N2499	2.30	1.85
2N2500	2.40	1.60
	1-9	10-99
2N2503	43.05	40.69
2N2504	51.71	39.14
2N2505	68.25	43.27
2N2506	76.65	48.51
2N2507	91.35	57.33
2N2508	109.20	68.36
	1-99	100-999
2N2509	.75	.50
2N2510	.80	.53
2N2511	.88	.58
2N2574	3.55	3.05
2N2575	3.75	3.20
2N2576	4.75	4.05
2N2577	6.80	5.40
2N2578	10.20	7.40
2N2579	13.60	10.75
2N2594	1.85	1.34
2N2606	3.30	2.70
2N2607	2.10	1.75
2N2608	1.75	1.45
2N2609	1.85	1.55
2N2619	12.92	9.34
2N2631	4.20	3.05
2N2632	37.70	29.00
2N2633	52.00	40.00
2N2634	66.30	51.00
2N2639	3.13	2.08
2N2640	2.75	1.83
2N2641	2.50	1.67
2N2642	3.38	2.25
2N2643	3.13	2.08
2N2644	3.75	2.50
2N2646	1.00	.67
2N2647	1.89	1.26
2N2653	6.95	6.00
2N2657	5.33	4.10
2N2658	7.80	6.00
2N2708	.50	.33
2N2711	.41	.27
2N2712	.41	.27
2N2713	.45	.30
2N2714	.47	.32
2N2720	7.13	4.75
2N2721	6.25	4.73
2N2722	7.43	4.95
2N2811	21.12	16.25
2N2812	22.75	17.50
2N2813	24.70	19.00
2N2814	27.30	21.00
2N2840	6.35	4.25
2N2841	2.70	2.25
2N2842	2.25	1.95
2N2843	1.15	.95
2N2844	2.35	1.95
2N2849/-1	28.60	22.00
2N2850/-1	13.00	10.00
2N2851/-1	14.30	11.00
2N2852/-1	12.35	9.50
2N2853/-1	19.50	15.00
2N2854/-1	16.90	13.00
2N2855/-1	9.10	7.00
2N2856/-1	6.50	5.00
2N2857	2.72	1.98
2N2865	1.00	.67
2N2876	12.35	10.25
2N2877	9.75	7.50
2N2878	11.37	8.75
2N2879	11.70	9.00
2N2880	14.30	11.00
2N2888	12.60	8.82
2N2889	13.65	9.92
2N2890	6.17	4.75
2N2891	6.82	5.25
2N2892	12.67	9.75
2N2893	13.65	10.50
2N2895	.93	.62
2N2896	1.35	.90
2N2897	1.05	.70
2N2903	1.68	1.12
2N2903A	2.13	1.42
2N2904	.55	.37
2N2904A	.63	.42
2N2905	.55	.37

DEVICE	1-99	100-999
2N2905A	.63	.42
2N2906	.40	.27
2N2906A	.45	.30
2N2907	.40	.27
2N2907A	.45	.30
2N2913	1.50	1.00
2N2914	1.75	1.17
2N2915	2.50	1.67
2N2915A	3.75	2.50
2N2916	3.13	2.08
2N2916A	3.75	2.50
2N2917	1.75	1.17
2N2918	2.00	1.33
2N2919	1.75	1.17
2N2919A	3.75	2.50
2N2920	3.75	2.50
2N2920A	7.38	4.92
2N2923	.29	.20
2N2924	.32	.21
2N2925	.38	.26
2N2926	.27	.18
2N2944	5.50	3.68
2N2945	5.00	3.35
2N2946	5.50	3.68
2N2951	3.75	2.80
2N2952	3.75	2.80
2N2958	1.80	1.20
2N2959	1.45	.95
2N2968	43.75	35.45
2N2970	29.15	23.60
2N2971	29.15	23.60
2N2983	10.40	8.00
2N2984	18.20	14.00
2N2985	13.26	10.20
2N2986	18.20	14.00
2N2987	7.15	5.50
2N2988	9.75	7.50
2N2989	8.32	6.40
2N2990	11.37	8.75
2N3019	.68	.45
2N3020	.68	.45
2N3053	.54	.38
2N3054	1.07	.78
2N3055	1.42	1.05
2N3058	18.00	13.20
2N3059	14.25	9.95
2N3060	3.45	2.50
2N3061	4.95	3.60
2N3066	1.45	1.20
2N3067	1.15	.95
2N3068	1.65	1.40
2N3069	3.00	2.50
2N3070	1.30	1.10
2N3071	2.40	2.00
	1-9	10-99
2N3091	52.50	33.08
2N3092	65.10	40.79
2N3093	77.70	48.51
2N3094	89.25	56.23
2N3095	109.20	68.36
2N3096	126.00	80.48
2N3097	147.00	92.61
2N3098	162.75	103.64
	1-99	100-999
2N3117	.63	.42
2N3118	4.95	3.60
2N3119	5.36	3.90
2N3133	4.95	3.30
2N3134	5.85	3.90
2N3135	4.95	3.30
2N3136	5.85	3.90
2N3217	2.55	1.70
2N3218	2.25	1.50
2N3219	2.55	1.70
2N3228	1.47	1.07
2N3229	22.21	18.38
2N3232	.99	.72
2N3250	.65	.43
2N3251	.65	.43
2N3262	8.30	6.00
2N3263	46.40	38.40
2N3264	40.60	33.60
2N3265	47.15	39.00
2N3266	40.45	33.50
2N3269	2.68	2.30
2N3270	3.42	2.92
2N3271	4.88	4.10
2N3272	7.32	6.10
2N3317	12.75	10.45
2N3318	7.40	6.00
2N3319	3.75	3.10
2N3328	3.50	2.30
2N3329	1.85	1.55
2N3330	1.75	1.45
2N3331	2.10	1.75
2N3332	5.20	3.35
2N3365	1.15	.95
2N3366	1.00	.85
2N3367	1.45	1.00
2N3368	.85	.60

SEMICONDUCTOR GUIDE

DEVICE	1-99	100-999
2N3369	.95	.80
2N3370	1.15	.95
2N3375	9.90	7.20
2N3376	2.25	1.90
2N3382	3.30	2.75
2N3384	5.90	4.95
2N3386	3.30	2.75
2N3390	.95	.63
2N3391	.43	.29
2N3391A	.47	.32
2N3392	.29	.20
2N3393	.29	.20
2N3394	.27	.18
2N3395	.50	.33
2N3396	.50	.33
2N3397	.47	.32
2N3398	.54	.36
2N3402	.36	.24
2N3403	.38	.26
2N3404	.50	.33
2N3405	.61	.40
2N3414	.344	.228
2N3415	.369	.246
2N3416	.45	.30
2N3417	.56	.38
2N3418	7.48	5.75
2N3419	8.45	6.50
2N3420	7.80	6.00
2N3421	8.45	6.50
2N3423	8.75	5.83
2N3424	11.25	7.50
2N3435	7.43	5.40
2N3436	1.25	1.05
2N3437	1.15	.95
2N3438	1.55	1.30
2N3439	1.35	.98
2N3440	1.01	.74
2N3441	1.56	1.13
2N3442	3.03	2.21
2N3445	7.00	5.40
2N3446	9.10	7.00
2N3447	9.75	7.50
2N3448	11.70	9.00
2N3452	1.85	1.50
2N3453	1.65	1.40
2N3454	1.95	1.65
2N3455	1.95	1.65
2N3456	1.85	1.55
2N3457	2.20	1.85
2N3458	1.20	1.00
2N3459	1.20	1.00
2N3460	1.80	1.35
2N3469	10.72	8.25
2N3478	1.48	1.08
2N3506	9.10	7.00
2N3507	10.51	8.10
2N3525	1.77	1.29
2N3528	1.44	1.05
2N3529	1.75	1.28
2N3553	3.00	2.20
2N3563	.30	.22
2N3564	.30	.22
2N3565	.25	.18
2N3566	.30	.22
2N3567	.30	.22
2N3568	.35	.26
2N3569	.30	.22
2N3574	17.00	11.00
2N3575	18.00	12.00
2N3583	1.32	.96
2N3584	1.90	1.38
2N3585	2.31	1.68
2N3597	35.10	27.00
2N3598	37.70	29.00
2N3599	40.30	31.00
2N3600	2.14	1.56
2N3632	11.50	9.50
2N3638	.25	.18
2N3638A	.27	.20
2N3639	.40	.28
2N3640	.42	.29
2N3641	.30	.22
2N3642	.30	.22
2N3643	.30	.22
2N3644	.33	.24
2N3645	.33	.24
2N3646	.27	.20
2N3649	6.15	4.10
2N3650	8.02	5.35
2N3651	12.15	8.10
2N3652	15.30	10.20
2N3653	20.85	13.90
2N3654	6.82	4.55
2N3655	8.85	5.90
2N3656	13.27	8.85
2N3657	16.70	11.15
2N3658	22.80	15.20
2N3662	.52	.35
2N3663	.56	.38
2N3668	2.39	1.74
2N3669	2.81	2.04

DEVICE	1-99	100-999
2N3670	3.80	2.76
2N3677	5.50	3.68
2N3688	.42	.26
2N3689	.42	.26
2N3690	.48	.33
2N3691	.30	.22
2N3692	.30	.22
2N3693	.30	.22
2N3694	.30	.22
2N3721	.41	.27
2N3724	1.50	.80
2N3725	2.70	.90
2N3732	1.65	1.20
2N3733	12.70	10.50
2N3744	12.61	9.70
2N3745	13.00	10.00
2N3746	14.95	11.50
2N3747	13.65	10.50
2N3748	14.95	11.50
2N3749	17.03	13.10
2N3750	14.62	11.25
2N3751	16.12	12.40
2N3752	19.89	15.30
2N3771	3.30	2.40
2N3772	3.30	2.40
2N3773	4.95	3.60
2N3819	1.75	1.45
2N3821	1.60	1.35
2N3822	1.45	1.20
2N3823	1.20	.90
2N3824	1.05	.85
2N3839	9.90	7.20
2N3840	9.60	7.00
2N3843	.43	.29
2N3843A	.45	.30
2N3844	.45	.30
2N3844A	.47	.32
2N3845	.47	.32
2N3845A	.50	.33
2N3850	8.77	6.75
2N3851	8.77	6.75
2N3852	6.82	5.25
2N3853	6.82	5.25
2N3854	.34	.23
2N3854A	.36	.24
2N3855	.36	.24
2N3855A	.38	.26
2N3856	.38	.26
2N3856A	.41	.27
2N3858	.27	.18
2N3858A	.34	.23
2N3859	.29	.20
2N3859A	.36	.24
2N3860	.32	.21
2N3866	1.50	1.00
2N3870	3.75	3.20
2N3871	4.75	4.05
2N3872	10.20	7.40
2N3873	17.00	12.75
2N3877	.45	.30
2N3877A	.52	.35
2N3878	1.65	1.20
2N3879	2.48	1.80
2N3896	3.96	2.88
2N3897	4.87	3.54
2N3898	6.27	4.56
2N3899	7.67	5.58
2N3900	.41	.27
2N3900A	.45	.30
2N3901	1.06	.71
2N3903	.44	.34
2N3904	.46	.32
2N3905	.44	.34
2N3906	.46	.32
2N3909	1.00	.85
2N3919	6.50	4.50
2N3920	7.10	4.90
2N3921	8.50	7.20
2N3922	5.75	4.80
2N3934	10.80	7.20
2N3935	7.20	4.80
2N3946	.75	.50
2N3947	.75	.50
2N3954	7.15	5.95
2N3954A	8.25	5.50
2N3955	4.65	3.90
2N3955A	5.50	3.66
2N3956	3.80	2.55
2N3957	2.15	1.80
2N3958	1.65	1.30
2N3966	2.60	2.10
2N3967	1.50	1.25
2N3967A	1.90	1.50
2N3968	2.50	1.95
2N3968A	2.60	2.10
2N3969	1.70	1.40
2N3969A	2.10	1.70
2N3970	1.50	1.15
2N3971	1.25	1.05
2N3972	1.55	1.30
2N3975	.38	.20

DEVICE	1-99	100-999
2N3976	.41	.27
2N3977	3.30	2.20
2N3978	3.00	2.20
2N3979	3.30	2.20
2N3996	16.25	12.50
2N3997	17.22	13.25
2N3998	11.37	8.75
2N3999	12.67	9.75
2N4000	6.17	4.75
2N4001	6.63	5.10
2N4002	82.87	63.75
2N4003	91.00	70.00
2N4007	6.00	4.00
2N4008	7.85	5.25
2N4012	14.20	11.75
2N4013	1.90	.95
2N4014	2.90	1.90
2N4036	1.02	.74
2N4037	.83	.60
2N4063	1.35	.98
2N4064	1.06	.77
2N4070	16.31	12.55
2N4075	16.90	13.00
2N4076	20.80	16.00
2N4082	4.60	3.90
2N4083	4.10	3.45
2N4084	5.10	4.35
2N4085	4.60	3.90
2N4091	1.80	1.05
2N4091A	1.45	1.20
2N4092	1.05	.90
2N4092A	1.45	1.20
2N4093	1.25	1.05
2N4093A	1.60	1.35
2N4101	2.22	1.61
2N4102	2.22	1.60
2N4103	5.12	3.72
2N4111	4.55	3.50
2N4112	5.20	4.00
2N4113	5.20	4.00
2N4114	7.00	5.25
2N4117	2.05	1.70
2N4117A	2.25	1.90
2N4118	1.60	1.35
2N4118A	2.70	2.25
2N4119	1.45	1.20
2N4119A	2.50	2.10
2N4121	.33	.22
2N4122	.60	.40
2N4123	.32	.21
2N4124	.32	.21
2N4125	.32	.21
2N4126	.32	.21
2N4139	7.50	5.00
2N4140	.60	.40
2N4141	.60	.40
2N4142	.60	.40
2N4143	.60	.40
2N4150	16.25	12.50
2N4151	1.11	.74
2N4152	1.26	.84
2N4153	1.41	.96
2N4154	1.68	1.10
2N4155	1.93	1.35
2N4156	2.25	1.55
2N4157	3.43	2.35
2N4158	4.46	3.15
2N4159	1.11	.74
2N4160	1.26	.84
2N4161	1.41	.96
2N4162	1.68	1.10
2N4163	1.93	1.35
2N4164	2.25	1.55
2N4165	3.43	2.35
2N4166	4.46	3.15
2N4175	1.34	.95
2N4176	1.49	1.05
2N4177	1.64	1.20
2N4178	1.79	1.25
2N4179	2.16	1.50
2N4180	2.46	1.70
2N4181	3.66	2.50
2N4182	4.69	3.20
2N4183	1.19	.85
2N4184	1.34	.95
2N4185	1.49	1.10
2N4186	1.64	1.19
2N4187	2.01	1.49
2N4188	2.31	1.69
2N4189	3.51	2.50
2N4190	4.54	3.30
2N4191	1.19	.85
2N4192	1.34	.95
2N4193	1.49	1.10
2N4194	1.64	1.19
2N4195	2.01	1.49
2N4196	2.31	1.69
2N4197	3.51	2.50
2N4198	4.54	3.30
2N4210	52.00	40.00
2N4211	57.20	44.00

DEVICE	1-99	100-999
2N4212	1.73	1.22
2N4213	1.91	1.33
2N4214	2.39	1.68
2N4215	2.63	1.84
2N4216	2.87	2.01
2N4217	3.11	2.17
2N4218	3.34	2.34
2N4219	3.81	2.67
2N4220	.90	.75
2N4220A	1.05	.85
2N4221	.95	.65
2N4221A	1.10	.75
2N4222	.95	.65
2N4222A	1.10	.65
2N4223	.85	.75
2N4224	.95	.75
2N4228	.60	.40
2N4240	2.06	1.50
2N4248	.60	.40
2N4249	.60	.40
2N4250	.60	.40
2N4250A	.60	.40
2N4256	.68	.45
2N4257	.37	.23
2N4258	.51	.32
2N4264	.30	.20
2N4265	.33	.22
2N4274	.30	.20
2N4275	.60	.40
2N4300	7.02	5.40
2N4301	24.05	18.50
2N4302	.50	.30
2N4303	.50	.30
2N4304	.40	.25
2N4314	.92	.67
2N4338	1.75	1.45
2N4339	1.45	1.20
2N4340	1.45	1.20
2N4341	1.60	1.35
2N4342	.71	.43
2N4343	1.08	.60
2N4347	2.16	1.58
2N4348	3.58	2.60
2N4360	1.35	.90
	1-9	**10-99**
2N4361	21.00	16.54
2N4362	26.25	18.74
2N4363	39.90	26.46
2N4364	55.65	34.18
2N4365	81.90	50.72
2N4366	110.25	71.66
2N4367	152.25	97.02
2N4368	189.00	121.28
2N4371	21.00	16.54
2N4372	26.25	18.74
2N4373	39.90	26.46
2N4374	55.65	34.18
2N4375	81.90	50.72
2N4376	110.25	71.66
2N4377	152.25	97.02
2N4378	189.00	121.28
	1-99	**100-999**
2N4381	2.80	1.70
2N4382	3.50	2.10
2N4383	1.05	.80
2N4384	1.05	.80
2N4385	.75	.55
2N4386	.75	.55
2N4391	2.00	1.20
2N4392	1.50	1.00
2N4393	2.00	1.20
2N4400	.57	.35
2N4401	.71	.44
2N4402	.60	.40
2N4403	.71	.45
2N4409	.64	.40
2N4410	.90	.56
2N4412	1.80	1.35
2N4412A	1.95	1.45
2N4413	1.80	1.35
2N4413A	1.95	1.45
2N4414	1.25	.95
2N4414A	1.40	1.05
2N4415	1.25	.95
2N4415A	1.40	1.05
2N4416	1.20	1.00
2N4416A	1.80	1.10
2N4424	.43	.29
2N4425	.47	.32
2N4427	1.78	1.30
2N4436	.40	.25
2N4437	.51	.38
2N4440	11.30	9.35
2N4445	8.60	6.15
2N4446	6.50	5.45
2N4447	7.95	5.85
2N4448	6.15	5.20
2N4482	6.20	4.15
2N4856	2.25	1.90

SEMICONDUCTOR GUIDE

DEVICE	1-99	100-999
2N4856A	2.40	2.00
2N4857	1.90	1.60
2N4857A	2.15	1.80
2N4858	1.55	1.30
2N4858A	1.80	1.50
2N4859	1.85	1.55
2N4859A	1.90	1.60
2N4860	1.65	1.40
2N4860A	2.05	1.70
2N4861	1.55	1.30
2N4861A	1.75	1.45
2N4863	6.50	5.00
2N4864	7.93	6.10
2N4867	5.65	4.75
2N4867A	11.90	9.95
2N4868	4.50	3.75
2N4868A	9.50	7.95
2N4869	2.95	2.45
2N4869A	7.70	6.45
2N4877	3.26	2.55
2N4881	5.85	3.90
2N4883	4.45	2.95
2N4884	4.80	3.20
2N4885	4.95	3.30
2N4886	4.35	2.90
2N4895	7.15	5.40
2N4896	8.78	6.75
2N4897	9.44	7.25
2N4916	.31	.22
2N4917	.33	.24
2N4932	29.00	24.00
2N4933	29.00	24.00
2N4944	.60	.40
2N4945	.60	.40
2N4946	.60	.40
2N4951	.33	.22
2N4952	.36	.24
2N4953	.42	.28
2N4954	.30	.20
2N4964	.60	.40
2N4965	.60	.40
2N4966	.60	.40
2N4967	.60	.40
2N4968	.60	.40
2N4969	.60	.40
2N4970	.60	.40
2N4971	.60	.40
2N4972	.60	.40
2N4977	3.80	2.50
2N4978	3.50	2.35
2N4979	3.30	2.20
2N4983	1.17	.78
2N4984	1.50	1.00
2N4985	2.61	1.75
2N4986	1.43	.95
2N4987	.84	.56
2N4988	1.23	.82
2N4989	1.73	1.15
2N4990	.89	.59
2N4991	.75	.50
2N4992	1.35	.90
2N4993	1.65	1.10
2N4994	.278	.185
2N4995	.306	.203
2N4998	15.60	12.00
2N5000	17.50	14.40
2N5002	20.80	16.00
2N5004	31.20	24.00
2N5006	47.00	35.00
2N5008	28.00	21.00
2N5016	32.00	26.60
2N5018	3.50	2.35
2N5019	3.30	2.20
2N5020	1.85	1.55
2N5021	1.25	1.05
2N5033	.90	.60
2N5034	1.52	1.12
2N5035	1.50	1.09
2N5036	1.62	1.18
2N5037	1.61	1.16
2N5038	5.78	4.20
2N5039	4.87	3.54
2N5045	6.75	5.00
2N5046	5.80	4.45
2N5047	5.80	4.45
2N5048	4.75	3.60
2N5055	.43	.27
2N5070	29.00	24.00
2N5071	29.00	24.00
2N5078	2.60	2.00
2N5079	2.50	1.67
2N5080	2.00	1.33
2N5081	1.50	1.00
2N5082	1.13	.75
2N5083	16.25	12.50
2N5084	20.45	15.75
2N5085	25.00	19.25
2N5086	.71	.44
2N5087	.40	.27
2N5088	.71	.44
2N5089	.93	.58
2N5090	11.40	8.30

DEVICE	1-99	100-999
2N5102	21.75	18.00
2N5103	2.50	1.65
2N5104	3.10	2.00
2N5105	3.80	2.50
2N5109	2.80	2.05
2N5114	4.40	3.70
2N5115	4.20	3.50
2N5116	6.00	4.00
2N5126	.60	.40
2N5127	.60	.40
2N5128	.60	.40
2N5129	.60	.40
2N5130	.60	.40
2N5131	.60	.40
2N5132	.60	.40
2N5133	.60	.40
2N5134	.60	.40
2N5135	.60	.40
2N5136	.60	.40
2N5137	.60	.40
2N5138	.60	.40
2N5139	.60	.40
2N5142	.60	.40
2N5143	.60	.40
2N5148	3.90	3.00
2N5150	5.20	4.00
2N5152	6.50	5.00
2N5154	7.80	6.00
2N5163	.40	.30
2N5172	.22	.146
2N5174	.65	.44
2N5175	.70	.47
2N5176	.74	.50
2N5179	.81	.59
2N5180	.83	.60
2N5189	.86	.64
2N5196	12.50	10.50
2N5197	8.95	7.50
2N5198	6.25	5.25
2N5199	3.30	2.20
2N5202	2.00	1.45
2N5204	9.30	6.20
2N5205	14.10	9.40
2N5206	18.45	12.30
2N5207	24.60	16.40
2N5209	.62	.38
2N5210	.69	.43
2N5219	.28	.19
2N5220	.27	.17
2N5221	.30	.19
2N5222	.24	.16
2N5223	.21	.14
2N5224	.24	.16
2N5225	.24	.16
2N5226	.29	.20
2N5227	.24	.16
2N5228	.28	.19
2N5232	.34	.23
2N5232A	.38	.26
2N5237	53.82	41.40
2N5238	63.70	49.00
2N5239	2.97	2.16
2N5240	3.47	2.52
2N5245	.69	.55
2N5246	.57	.49
2N5247	.52	.41
2N5249	.50	.33
2N5249A	.54	.36
	1-9	10-99
2N5257	69.83	46.31
2N5258	97.65	60.64
2N5259	142.80	89.30
2N5260	193.20	125.69
	1-99	100-999
2N5262	1.84	1.34
2N5277	4.00	2.65
2N5278	4.35	2.90
2N5284	45.50	35.00
2N5285	52.00	40.00
2N5293	.81	.59
2N5294	.81	.59
2N5295	.81	.59
2N5296	.81	.59
2N5297	.86	.62
2N5298	.86	.62
2N5305	.45	.30
2N5306	.43	.29
2N5306A	.50	.33
2N5307	.47	.32
2N5308	.52	.35
2N5308A	.59	.39
2N5309	.56	.33
2N5310	.63	.42
2N5311	.74	.50
2N5313	48.10	37.00
2N5315	58.50	45.00
2N5320	1.14	.83
2N5321	.91	.66
2N5322	1.47	1.07
2N5323	1.01	.73

DEVICE	1-99	100-999
2N5326	16.25	12.50
2N5328	24.00	18.00
2N5334	3.26	2.50
2N5335	3.78	2.90
2N5336	5.20	4.00
2N5337	6.82	5.25
2N5338	7.47	5.75
2N5339	8.77	6.75
2N5346	31.20	24.00
2N5347	33.80	26.00
2N5348	39.00	30.00
2N5349	44.20	34.00
2N5354	.36	.24
2N5355	.41	.27
2N5356	.47	.32
2N5358	1.80	1.30
2N5359	1,75	1.20
2N5360	1.75	1.20
2N5361	1.70	1.15
2N5362	1.70	1.15
2N5363	1.80	1.30
2N5364	2.10	1.50
2N5365	.45	.30
2N5366	.50	.33
2N5367	.56	.38
2N5368	.26	.18
2N5369	.28	.18
2N5370	.28	.19
2N5371	.26	.17
2N5372	.28	.19
2N5373	.29	.19
2N5374	.31	.21
2N5375	.28	.18
2N5376	.42	.28
2N5377	.38	.25
2N5378	.51	.34
2N5379	.45	.30
2N5380	.60	.40
2N5381	.66	.44
2N5382	.67	.45
2N5383	.73	.49
2N5391	5.55	4.35
2N5392	4.60	3.75
2N5393	5.55	4.35
2N5394	4.30	3.50
2N5395	4.60	3.75
2N5396	4.30	3.50
2N5397	3.50	2.95
2N5398	2.95	2.45
2N5412	25.00	19.25
2N5415	1.24	.90
2N5416	1.62	1.18
2N5418	.32	.21
2N5419	.36	.24
2N5420	.43	.29
2N5427	5.72	4.40
2N5428	7.15	5.50
2N5429	7.93	6.10
2N5430	9.36	7.20
2N5432	7.35	6.15
2N5433	6.50	5.45
2N5434	7.10	5.95
2N5441	5.64	4.10
2N5442	6.77	4.92
2N5443	8.46	6.16
2N5444	5.97	4.34
2N5445	7.10	5.16
2N5446	8.79	6.40
2N5447	.30	.20
2N5448	.34	.29
2N5449	.29	.19
2N5450	.26	.17
2N5451	.27	.24
2N5457	.45	.32
2N5458	.56	.33
2N5459	.62	.37
	1-24	25-99
2N5470	50.00	43.00
	1-99	100-999
2N5477	23.40	18.00
2N5478	27.90	21.45
2N5479	28.60	22.00
2N5480	32.50	25.00
2N5484	.74	.43
2N5485	.57	.45
2N5486	.57	.45
2N5487/-1	15.60	12.00
2N5488/-1	15.60	12.00
2N5490	.96	.70
2N5491	.96	.70
2N5492	.96	.70
2N5493	.96	.70
2N5494	.96	.70
2N5495	.96	.70
2N5496	1.04	.76
2N5497	1.04	.76
2N5515	14.05	11.75
2N5516	10.50	8.80
2N5517	8.30	6.95
2N5518	6.15	5.15

DEVICE	1-99	100-999
2N5519	4.65	3.90
2N5520	21.45	17.95
2N5521	15.95	13.35
2N5522	11.80	9.90
2N5523	8.95	7.50
2N5524	8.30	6.95
2N5543	5.85	3.90
2N5544	4.45	2.95
2N5545	5.95	5.00
2N5546	5.30	4.45
2N5547	4.20	3.50
2N5550	.69	.45
2N5551	.84	.56
2N5552	19.52	15.00
2N5555	1.00	.63
2N5556	1.70	1.40
2N5557	1.60	1.30
2N5558	1.50	1.20
2N5561	15.95	13.95
2N5562	13.75	10.95
2N5563	10.15	8.90
2N5564	7.10	5.95
2N5566	5.80	4.95
2N5567	3.05	2.22
2N5568	3.66	2.66
2N5569	3.38	2.46
2N5570	3.99	2.90
2N5571	3.25	2.36
2N5572	3.89	2.83
2N5573	3.58	2.60
2N5574	4.22	3.07
2N5575	27.41	22.68
2N5576	27.41	22.68
2N5577	30.45	25.20
2N5578	30.45	25.20
2N5579	29.00	24.00
2N5580	33.50	27.72
2N5638	1.35	.75
2N5639	.85	.54
2N5640	.95	.60
2N5647	4.20	3.50
2N5648	3.70	3.10
2N5649	3.95	3.30
2N5653	1.25	.72
2N5654	1.10	.70
2N5668	.82	.53
2N5669	.75	.48
2N5670	.75	.50
2N5671	16.59	13.76
2N5672	22.68	18.80
2N5716	.80	.53
2N5717	.75	.50
2N5718	.80	.53
2N5754	1.19	.87
2N5755	1.41	1.02
2N5756	1.69	1.23
2N5757	2.12	1.54
2N5777	.60	.50
2N5778	.70	.55
2N5779	1.00	.70
2N5780	1.20	.80
2N5781	1.41	1.02
2N5782	1.24	.90
2N5783	1.16	.84
2N5784	1.24	.90
2N5785	1.08	.78
2N5786	.99	.72
2N5804	4.54	3.30
2N5805	5.95	4.32
2N5810	.36	.24
2N5811	.41	.27
2N5812	.38	.26
2N5813	.45	.30
2N5814	.38	.26
2N5815	.38	.26
2N5816	.41	.27
2N5817	.41	.27
2N5818	.43	.29
2N5819	.45	.30
2N5820	.49	.32
2N5821	.68	.45
2N5822	.62	.41
2N5823	.70	.46
2N5824	.25	.17
2N5825	.27	.18
2N5826	.29	.20
2N5827	.32	.21
2N5827A	.38	.26
2N5828	.34	.23
2N5828A	.41	.27
2N5838	2.72	1.98
2N5839	2.89	2.10
2N5840	3.22	2.34
2N5845	.55	.39
2N5902	14.25	11.95
2N5903	10.05	8.40
2N5904	6.80	5.70
2N5905	4.70	3.95
2N5906	17.20	14.40
2N5907	11.90	9.95
2N5908	8.20	6.85
2N5909	5.65	4.75

SEMICONDUCTOR GUIDE

DEVICE	1-99	100-999
2N5911	9.50	7.95
2N5912	5.05	4.25
2N5913	3.63	2.64
2N5914	11.05	8.05
2N5915	12.15	10.00
2N5916	12.33	10.20
2N5917	11.60	9.60
2N5918	17.40	14.40
2N5919A	23.20	19.20
	1-24	**25-99**
2N5920	75.00	64.50
2N5921	100.00	86.00
	1-99	**100-999**
2N5954	1.56	1.14
2N5955	1.40	1.02
2N5956	1.23	.90
2N5992	9.20	6.70
2N5993	12.95	10.10
2N5994	20.30	16.75
2N5995	9.20	6.70
2N5996	12.95	10.70
2N5998	.47	.32
2N5999	.50	.33
2N6000	.54	.36
2N6001	.56	.38
2N6002	.59	.39
2N6003	.59	.39
2N6004	.59	.39
2N6005	.59	.39
2N6006	.72	.48
2N6007	.77	.51
2N6008	.52	.35
2N6009	.54	.36
2N6010	.68	.45
2N6011	.70	.46
2N6012	.72	.48
2N6013	.74	.50
2N6014	.72	.48
2N6015	.74	.50
2N6016	.95	.63
2N6017	.99	.66
2N6027	.79	.53
2N6028	1.00	.65
2N6032	34.65	28.70
2N6033	46.40	38.40
2N6055	2.32	1.72
2N6056	2.80	2.07
2N6076	.25	.17
2N6077	2.64	1.92
2N6078	2.47	1.80
2N6079	2.96	2.16
2N6085	2.88	1.92
2N6086	2.50	1.67
2N6087	3.75	2.50
2N6088	4.38	2.92
2N6089	2.63	1.75
2N6090	2.75	1.83
2N6091	4.00	2.67
2N6092	4.75	3.17
2N6093	80.00	66.00
2N6098	1.07	.78
2N6099	1.07	.78
2N6100	1.15	.84
2N6101	1.15	.84
2N6102	1.24	.90
2N6103	1.24	.90
2N6104	47.85	39.60
2N6105	47.85	39.60
2N6106	.89	.65
2N6107	.89	.65
2N6108	.89	.65
2N6109	.89	.65
2N6110	.86	.63
2N6111	.86	.63
2N6114	4.86	3.26
2N6115	3.03	1.36
2N6175	.81	.59
2N6176	.93	.67
2N6177	1.11	.81
2N6178	.98	.71
2N6179	.74	.54
2N6180	1.24	.90
2N6181	.87	.64
2N6211	3.71	2.70
2N6212	4.54	3.30
2N6213	6.52	4.74
2N6214	9.00	6.54
2N6218	.68	.45
2N6219	.65	.44
2N6220	.63	.42
2N6221	.56	.38
2N6222	.29	.20
2N6223	.32	.21
2N6224	.34	.23
2N6225	.36	.24
2N6246	1.98	1.44
2N6247	2.31	1.68
2N6248	2.64	1.92
2N6249	8.25	6.00
2N6250	9.15	6.67

DEVICE	1-99	100-999
2N6251	9.80	7.15
2N6253	1.13	.82
2N6254	1.90	1.38
2N6257	2.68	1.94
2N6258	4.23	3.08
2N6259	5.95	4.30
2N6260	.91	.66
2N6261	1.18	.86
2N6262	3.22	2.34
2N6263	1.24	.90
2N6264	1.82	1.32
	1-24	**25-99**
2N6265	75.00	64.50
2N6266	110.00	93.00
2N6267	120.00	104.00
2N6268	75.00	64.50
2N6269	150.00	130.00
	1-99	**100-999**
2N6288	.78	.56
2N6289	.78	.56
2N6290	.81	.59
2N6291	.81	.59
2N6292	.81	.59
2N6293	.81	.59
2N6354	4.70	3.42
2N6371	1.42	1.05
2N6372	1.40	1.02
2N6373	1.23	.90
2N6374	1.07	.78
2N6383	1.73	1.26
2N6384	1.89	1.38
2N6385	2.06	1.50
2N6388	1.23	.90
2N6387	1.48	1.08
2N6388	1.63	1.19
2N6389	2.90	2.10
	1-24	**25-99**
2N6390	92.00	80.00
2N6391	110.00	93.00
2N6392	115.00	100.00
2N6393	120.00	104.00
	1-99	**100-999**
2N6467	1.73	1.26
2N6468	1.89	1.38
2N6469	1.98	1.44
2N6470	1.56	1.14
2N6471	1.98	1.44
2N6472	2.31	1.68
2N6473	.86	.64
2N6474	.93	.68
2N6475	.95	.70
2N6476	1.02	.74
2N6477	1.11	.80
2N6478	1.36	.95
2N6479	90.75	66.00
2N6480	107.25	78.00
2N6481	82.50	60.00
2N6482	99.00	72.00
2N6486	1.49	1.08
2N6487	1.82	1.32
2N6488	2.15	1.56
2N6489	1.57	1.14
2N6490	1.90	1.38
2N6491	2.23	1.62
2N6496	5.78	4.20
2N6500	2.39	1.74
3N81	3.40	2.25
3N82	4.95	3.30
3N83	1.98	1.32
3N84	1.98	1.32
3N85	3.30	2.20
3N86	6.00	4.00
3N90	11.25	8.25
3N91	6.75	4.90
3N92	4.50	3.30
3N93	17.25	13.00
3N94	12.75	9.40
3N95	7.50	5.50
3N114	6.75	5.00
3N115	5.25	3.85
3N116	3.75	2.75
3N117	7.50	5.50
3N118	6.00	4.40
3N119	4.50	3.30
3N123	3.05	2.20
3N128	1.29	.94
3N138	2.89	2.10
3N139	2.48	1.80
3N140	1.62	1.18
3N141	1.45	1.06
3N142	1.04	.76
3N143	1.30	.95
3N152	1.62	1.18
3N153	1.42	1.03
3N154	1.49	1.08
3N159	2.06	1.50
3N187	2.72	1.98
3N200	4.37	3.18

DEVICE	1-99	100-999
4N35	3.25	1.15
4N36	2.80	1.85
4N37	2.30	1.50
	1-24	**25-99**
4000AE	1.17	.94
4001AE	1.17	.94
4002AE	1.17	.94
4004AE	6.00	4.86
4006AE	5.83	4.70
4007AE	1.17	.94
4008AE	6.03	4.86
4009AE	2.54	2.04
4010AE	2.54	2.04
4011AE	1.17	.94
4012AE	1.17	.94
4013AE	2.43	1.90
4014AE	6.35	5.12
4015AE	6.35	5.12
4016AE	2.43	1.90
4017AE	6.35	5.12
4018AE	6.35	5.12
4019AE	2.86	2.31
4020AE	7.07	5.70
4021AE	6.35	5.12
4022AE	6.14	4.94
4023AE	1.17	.94
4024AE	4.55	3.67
4025AE	1.17	.94
4026AE	8.48	6.83
4027AE	3.76	3.03
4028AE	5.51	4.44
4029AE	9.52	7.67
4030AE	2.45	1.97
4031AE	11.65	9.38
4032AE	6.35	5.12
4033AE	8.37	6.74
4034AD	18.00	14.50
4035 AE	6.25	5.03
4036AD	17.19	13.85
4037AE	4.55	3.67
4038AE	5.08	4.09
4039AD	17.19	13.85
4040AE	6.75	5.44
4041AE	5.08	4.09
4042AE	5.08	4.09
4043AE	5.08	4.09
4044AE	5.08	4.09
4045AE	6.30	5.08
4046AE	6.75	5.44
4047AE	4.50	3.63
4048AE	1.46	1.18
4049AE	2.25	1.81
4050AE	2.25	1.81
4051AE	4.35	3.85
4052AE	4.35	3.85
4053AE	4.35	3.85
4057AD	46.75	37.70
4059AD	24.50	19.70
4026AT	8.70	8.70
4066AE	2.67	2.15
101AT	5.10	4.08
101T	3.60	2.88
107T	5.10	4.08
108AT	21.25	17.00
108T	10.30	8.24
111T	18.00	14.00
113T	11.25	9.00
118T	23.20	18.56
201AT	3.78	3.02
201T	2.70	2.16
207T	3.78	3.02
208AT	14.10	11.28
208T	8.20	6.56
211T	11.25	9.00
213T	9.40	7.50
218T	17.85	14.28
301AS	1.10	.72
301AT	1.55	1.24
307P	1.10	.72
307S	1.10	.72
307T	.98	.78
308AT	9.10	7.55
308T	2.80	2.25
311S	4.85	3.90
311T	4.85	3.90
313T	6.10	4.85
318T	6.95	5.56
709AT	2.91	2.33
709CP	1.22	.79
709CT	.91	.81
709T	2.16	1.73
723CP	1.80	1.24
723CT	1.80	1.24
723T	3.60	2.88
741AT	3.60	2.88
741CP	1.24	.80
741CS	1.24	.80
741CT	1.29	1.05
741T	2.16	1.73
747CP	2.70	2.16

DEVICE	1-24	25-99
747CT	2.70	2.16
747T	4.90	3.91
748CP	1.24	.80
748CS	1.24	.80
748CT	1.24	.80
748T	2.16	1.73
776CP	4.25	3.40
776CT	4.50	3.60
776T	16.05	12.84
777CP	2.58	2.06
777CS	2.58	2.06
777CT	2.58	2.06
777T	4.32	3.46
1436T	3.75	3.00
1437P	2.37	1.90
1458P	2.40	1.56
1458S	2.40	1.56
1458T	2.40	1.56
1488M	8.25	6.90
1489AM	6.75	5.65
1489M	6.00	5.00
1536T	9.00	7.50
1537M	4.87	3.90
1558M	6.22	5.08
1558T	4.90	3.91
4250CM	5.00	4.00
4250CP	4.50	3.60
4250CT	4.75	3.80
4250M	18.75	15.00
4250T	16.95	13.56
4251CM	4.75	3.80
4251CP	4.25	3.40
4251CT	4.50	3.60

Package Codes:

T■T099

M■Hermetic Dual-in-line

P■Plastic Dual-in-line

S■8 pin plastic mini-dip

C■Commercial temperature range

DEVICE	1-24	25-99
1101AP	10.25	8.20
1101AR	12.50	10.00
1101A1P	12.25	9.80
1101A1R	15.00	12.00
1103P	11.55	9.23
1103R	13.45	10.75
1103-1P	17.30	13.85
1103-1R	19.20	15.39
1301P	22.30	17.60
1301R	25.75	20.60
1601R	70.70	56.60
602R	64.25	51.50
1602AR	67.50	54.50
1701R	77.20	61.75
1702R	70.70	56.60
1702AR	70.70	56.60
2102P	26.30	21.00
2102-1P	39.50	31.60
2102R	29.90	23.10
2102-1R	42.50	34.00
7107P	26.50	21.10
7107R	28.00	22.40
7108R	56.00	44.80
7110P	29.60	23.00
7110R	30.80	24.60
7112P	115.00	84.00
7112R	120.00	89.00
8008P	115.00	82.00
8008R	120.00	84.00
8008-1P	175.00	123.50
8008-1R	180.00	126.00

GENERAL ELECTRIC

DETECTORS

PHOTO TRANSISTORS

GE Type	Fig.	Minimum Sensitivity mA/mW/cm2	BV_{CEO} Volts	I_D Max. nA	Typical t_r µsec	Typical t_f µsec	Size, Inches Dia. x Lgth.	Net 1-99
L15AX601	E	.075	50	25	3	3	.092 x .115	$3.52
L15AX602	E	.125	50	25	3	3	.092 x .115	3.70
L15AX603	E	.20	50	25	3	3	.092 x .115	3.80
L15AX604	E	.35	50	25	3	3	.092 x .115	4.10
L15A600	E	.05	40	100	3	3	.092 x .115	3.15
L15E	F	.15	40	100	3	3	.095 x .115	3.00
L14A502	C	.3	45	100	5	5	.230 x .255	3.00
L14E1	B	.005	50	100	6	6	.170 x .210	.72
L14E2	B	.01	50	100	15	10	.170 x .210	.59
L14E3	B	.04	50	100	20	15	.170 x .210	1.08
L14E4	B	.005	50	10	20	15	.170 x .210	.56
L14C1	D	.1	45	10	5	5	.230 x .170	4.50
L14G1	C	.6	45	100	5	5	.230 x .255	1.56
L14G2	C	.3	45	100	5	5	.230 x .255	1.41

PHOTO DARLINGTON

GE Type	Fig.	Minimum Sensitivity mA/mW/cm2	BV_{CEO} Volts	I_D Max. nA	Typical t_r µsec	Typical t_f µsec	Size, Inches Dia. x Lgth.	Net 1-99
2N5777	B	.25	25	100	75	50	.170 x .210	.60
2N5778	B	.25	40	100	75	50	.170 x .210	.70
2N5779	B	1.0	25	100	75	50	.170 x .210	1.00
2N5780	B	1.0	40	100	75	50	.170 x .210	1.20
L14F	C	15	25	100	75	50	.230 x .255	6.75

PHOTO SWITCHES

GE Type	Fig.	Irradiance To Trigger mW/cm2	Blocking Volts	I_D Max. µA	V_F Volts	Size, Inches Dia. x Lgth.	Net 1-99
L14T1	B	.2	40	100 µA	1.6	.170 x .210	$1.10

COUPLERS

PHOTO TRANSISTOR OUTPUT

GE Type	Fig.	Isolation Volts	Minimum Current Transfer Ratio	I_D nA	BV_{CEO} Volts	Typical t_r µsec	Typical t_f µsec	Size, Inches W. x Lgth.	Net 1-99
H10A1	H	1000	20%	100	40	3	3	.370* x .260	$4.25
H11A1	I	2500	50%	50	30	2	2	.385 x .280	3.35
H11A2	I	1500	20%	50	30	2	2	.385 x .280	2.60
H11A3	I	2500	20%	50	30	2	2	.385 x .280	2.95
H11A4	I	1500	10%	50	30	2	2	.385 x .280	2.25
H15A1	K	4000	20%	100	30	3	3	.250 x .375	2.50
H15A2	K	4000	10%	100	30	3	3	.250 x .375	2.25
H211A1	M	2500	50%	50	30	2	2	.385 x .785	6.80
H211A2	M	1500	20%	50	30	2	2	.385 x .785	5.30
4N35	I	2500 rms	100%	50	30	5	5	.385 x .280	3.25
4N36	I	1750 rms	100%	50	30	5	5	.385 x .280	2.80
4N37	I	1050 rms	100%	50	30	5	5	.385 x .280	2.30

PHOTO DARLINGTON OUTPUT

GE Type	Fig.	Isolation Volts	Minimum Current Transfer Ratio	I_D nA	BV_{CEO} Volts	Typical t_r µsec	Typical t_f µsec	Size, Inches W. x Lgth.	Net 1-99
H10B1	H	1000	200%	100	25	125	100	.370* x .260	4.50
H11B1	I	2500	500%	100	25	125	100	.385 x .280	3.20
H11B2	I	1500	200%	100	25	125	100	.385 x .280	2.95
H15B1	K	4000	400%	100	25	125	100	.250 x .375	2.60
H15B2	K	4000	200%	100	25	125	100	.250 x .375	2.35
H211B1	M	2500	500%	100	25	125	100	.385 x .785	6.50
H211B2	M	1500	200%	100	25	125	100	.385 x .785	6.00

PHOTO SCR

GE Type	Fig.	Isolation Volts	I_F to Trigger mA	I_D µA	Blocking Volts	Typical t_{on} µsec	Typical V_F Volts	Size, Inches W. x Lgth.	Net 1-99
H10C1	H	1000	50	10	200	1	1.5	.370* x .260	$3.35
H11C1	I	2500	20	2	200		1.5	.385 x .280	4.00
H11C2	I	1500	20	2	200		1.5	.385 x .280	3.35
H211C1	M	2500	20	2	200		1.5	.385 x .785	8.10
H211C2	M	1500	20	2	200		1.5	.385* x .785	6.80

*Diameter.

PHOTON COUPLED INTERRUPTER MODULES

PHOTO TRANSISTOR OUTPUT

GE Type	Fig.	Output Current* µA	I_D nA	BV_{CEO} Volts	Typical t_{on} µsec	Typical t_f µsec	Size, Inches t x Lgth.	Net 1-99
H13A1	J	200	100	30	5	5	.125 x .984	$2.50
H13A2	J	50	100	30	5	5	.125 x .984	2.25

PHOTO DARLINGTON OUTPUT

GE Type	Fig.	Output Current* µA	I_D nA	BV_{CEO} Volts	Typical t_{on} µsec	Typical t_f µsec	Size, Inches t x Lgth.	Net 1-99
H13B1	J	1000†	100	25	150	150	.125 x .984	2.60
H13B2	J	500†	100	25	150	150	.125 x .984	2.35

*I_F=20 mA. †At I_F=10 mA. ‡Length between pins.

GENERAL ELECTRIC

Silicon Rectifiers

SILICON RECTIFIERS—0.25 to 1500 AMPS, UP TO 3000 VOLTS

GE Type	Fig.	I_F* Amps	Volts‡	NET 1-99
DT230F	A	.25	50	$.24
DT230A	A	.25	100	.26
DT230B	A	.25	200	.30
A14F	B	1	50	.30
A14A	B	1	100	.34
1N5059	B	1	200	.36
A14C	B	1	300	.40
1N5060	B	1	400	.43
A14E	B	1	500	.52
1N5061	B	1	600	.57
1N5062	B	1	800	.80
A14P	B	1	1000	.87
A14D	B	1	1400	.43
1N4245	B	1	200	.38
1N4246	B	1	400	.45
1N4247	B	1	600	.59
1N4248	B	1	800	.97
1N4249	B	1	1000	1.12
A14F§	B	1	50	.30
A14A§	B	1	100	.34
A14B§	B	1	200	.36
A14C§	B	1	300	.40
A14D§	B	1	400	.43
A14E§	B	1	500	.52
A14M§	B	1	600	.57
A15F	C	3	50	.57
A15A	C	3	100	.62
1N5624	C	3	200	.75
1N5625	C	3	400	1.00
1N5626	C	3	600	1.40
1N5627	C	3	800	3.75
A115F§	C	3	50	1.24
A115A§	C	3	100	1.28
A115B§	C	3	200	1.56
A115C§	C	3	300	
A115D§	C	3	400	2.10
A115E§	C	3	500	2.70
A115M§	C	3	600	3.10
1N1612	D	5	50	1.24
1N1613	D	5	100	1.43
1N1614	D	5	200	1.90
1N1615	D	5	400	3.75
1N1616	D	5	600	5.55
1N1341A	D	6	50	1.29
1N1342A	D	6	100	1.46
1N1344A	D	6	200	2.22
1N1345A	D	6	300	3.16
1N1346A	D	6	400	3.96
1N1347A	D	6	500	4.65
1N1348A	D	6	600	5.48
1N3988	D	6	800	8.76
1N3990	D	6	1000	10.80
1N3879§	D	6	50	2.55
1N3880§	D	6	100	2.93
1N3881§	D	6	200	3.23
1N3882§	D	6	300	3.83
1N3883§	D	6	400	4.50
1N1199A	D	12	50	1.43
1N1200A	D	12	100	1.62
1N1202A	D	12	200	2.62
1N1203A	D	12	300	3.60
1N1204A	D	12	400	4.57
1N1205A	D	12	500	5.32
1N1206A	D	12	600	6.37
1N3671A	D	12	800	8.77
1N3673A	D	12	1000	9.90
1N5331	D	12	1200	10.50
1N3889§	D	12	50	3.00
1N3890§	D	12	100	3.60
1N3891§	D	12	200	4.35
1N3892§	D	12	300	5.25
1N3893§	D	12	400	6.30

GE Type	Fig.	I_F* Amps	Volts‡	NET 1-99
A28F§	D	12	50	$3.82
A28A§	D	12	100	4.50
A28B§	D	12	200	5.70
A28C§	D	12	300	7.13
A28D§	D	12	400	8.25
1N248B	E	20	50	1.65
1N249B	E	20	100	1.73
1N250B	E	20	200	2.48
1N1195A	E	20	300	4.02
1N1196A	E	20	400	4.95
1N1197A	E	20	500	6.15
1N1198A	E	20	600	6.68
1N3899§	E	20	50	4.20
1N3900§	E	20	100	5.02
1N3901§	E	20	200	6.00
1N3902§	E	20	300	7.20
1N3903§	E	20	400	8.63
1N3208	F	20	50	2.10
1N3209	F	20	100	2.25
1N3210	F	20	200	2.40
1N3211	F	20	300	2.64
1N3212	F	20	400	3.05
1N3213	F	20	500	3.75
1N3214	F	20	600	4.50
A44F	G	20	50	1.51
A44A	G	20	100	1.63
A44B	G	20	200	1.81
A44C	G	20	300	1.98
A44D	G	20	400	2.15
A44E	G	20	500	2.63
A44M	G	20	600	3.30
A139E	G	20	500	12.15
A139M	G	20	600	13.20
A139N	G	20	800	15.30
A139P	G	20	1000	17.40
1N2154	E	25	50	2.74
1N2155	E	25	100	3.45
1N2156	E	25	200	4.38
1N2157	E	25	300	5.25
1N2158	E	25	400	5.92
1N2159	E	25	500	6.15
1N2160	E	25	600	6.30
1N3909§	E	30	50	4.88
1N3910§	E	30	100	5.85
1N3911§	E	30	200	6.98
1N3912§	E	30	300	8.40
1N3913§	E	30	400	10.13
1N1183	E	35	50	2.24
1N1184	E	35	100	2.76
1N1186	E	35	200	3.96
1N1187	E	35	300	4.72
1N1188	E	35	400	5.85
1N1189	E	35	500	6.45
1N1190	E	35	600	6.90
1N3766	E	35	800	9.75
1N3768	E	35	1000	11.62
1N5332	E	35	1200	12.60
				1-9
A70B	H	100	200	14.50
1N3289				14.50
A70C	H	100	300	15.50
1N3290				15.50
A70D	H	100	400	16.50
1N3291				16.50
A70E	H	100	500	17.50
1N3292				17.50
A70M	H	100	600	18.50
1N3293				18.50
A70N	H	100	800	21.00
1N3294				21.00
A70P	H	100	1000	23.00
1N3295				23.00

GE Type	Fig.	I_F* Amps	Volts‡	NET 1-9
A70PB	H	100	1200	$25.00
1N3296				25.00
1N3267	I	160	400	24.70
1N3268	I	160	500	26.45
1N3269	I	160	600	28.75
1N3271	I	160	800	32.70
1N3273	I	160	1000	37.90
A90D	I	250	400	25.00
1N3738				25.00
A90E	I	250	500	27.00
1N3739				27.00
A90M	I	250	600	29.00
1N3740				29.00
A90N	I	250	800	33.50
1N3741				33.50
A90P	I	250	1000	38.00
1N3742				38.00
A90PB	I	250	1200	42.00
A96A	I	250	100	23.50
A96B	I	250	200	26.00
A96C	I	250	300	29.00
A96D	I	250	400	32.00
A96E	I	250	500	35.00
A96M	I	250	600	38.00
A96N	I	250	800	44.00
A96P	I	250	1000	50.00
A291PC	J	250	1300	48.00
A291PD	J	250	1400	52.00
A291PE	J	250	1500	56.00
A291PM	J	250	1600	60.00
1N4049	I	275	300	23.50
1N4050	I	275	400	26.50
1N4051	I	275	500	28.50
1N4052	I	275	600	30.50
1N4054	I	275	800	35.00
1N4056	I	275	1000	40.00
A390M	K	400	600	24.00
A390N	K	400	800	28.00
A390P	K	400	1000	32.00
A390PB	K	400	1200	36.00
A396A	K	400	100	**
A396B	K	400	200	**
A396C	K	400	300	**
A396D	K	400	400	27.00
A396E	K	400	500	30.00
A295B	J	500	200	45.50
A295C	J	500	300	46.50
A295D	J	500	400	50.00
A295E	J	500	500	53.00
A295M	J	500	600	56.00
A295N	J	500	800	62.00
A295P	J	500	1000	78.00
A295PB#	J	500	1200	88.00
A540A	L	1000	100	65.50
A540B	L	1000	200	73.50
A540C	L	1000	300	78.00
A540D	L	1000	400	82.00
A540E	L	1000	500	88.00
A540M	L	1000	600	95.00
A540N	L	1000	800	106.00
A540P	L	1000	1000	118.00
A540PB	L	1000	1200	134.00
A540PD*	L	1000	1400	152.00
A570A	L	1500	100	92.50
A570B	L	1500	200	101.00
A570C	L	1500	300	109.50
A570D	L	1500	400	116.00
A570E	L	1500	500	123.50
A570M	L	1500	600	131.50
A570N	L	1500	800	148.50
A570P	L	1500	1000	165.50

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*Avg. forward current. †Surge current. ‡Maximum repetitive reverse voltage. §Fast recovery types. #Series A295 available up to 1800, write for information; also available is series A510 (IF = 740A, IFm = 8400A, Fig. L) from 500-3000 volts, write for complete information.

*Series A540 available up to 1800 volts, write for information.

GENERAL ELECTRIC

Silicon Controlled Rectifiers

SCR's FOR PHASE CONTROL

"Phase Control" is a term used to describe silicon controlled rectifiers having slow turn-off time. Primary application for a device with relatively slow turn-off time are AC phase control—hence the name "phase control". This type of device is also used for zero voltage switching and selected pulse applications.

25 to 500 VOLTS

rms Current Amps	GE Type For Repetitive Peak Forward and Blocking Voltage of (Volts)									
	25	Net 1-99	50	Net 1-99	100	Net 1-99	150	Net 1-99	200	Net 1-99
0.5			2N878	$3.30	2N879	$5.40	2N880	$6.30	2N881	$7.50
0.8			C103YY*	.72	C103A	.75			C103B	.84
1.6	2N2344	3.45	2N2345	3,90	2N2346	5.10	2N2347	9.15	2N2348	12.00
1.6	2N2322	1.77	2N2323	1.95	2N2324	3.08	2N2325	4.53	2N2326	5.82
1.6			2N1595	1.65	2N1596	2.40			2N1597	4.80
4.0			C106F	.78	C106A	.81			C106B	.90
4.0			C107F	.69	C107A	.72			C107B	.81
7.4	2N1770A	2.47	2N1771A	2.70	2N1772A	3.60	2N1773A	5.25	2N1774A	6.45
7.4	C11U		C11F		C11A		C11G		C11B	
7.4	2N1770	1.95	2N1771	2.17	2N1772	3.00	2N1773	4.35	2N1774	5.40
7.4	C220U	1.71	C220F	1.77	C220A	1.92			C220B	1.98
7.4	C222U	1.41	C222F	1.47	C222A	1.62			C222B	1.68
8.0			C15F	1.72	C15A	1.95	C15G	1.87	C15B	2.02
8.0			C122F	1.20					C122B	1.50
16.0	2N1842	2.24	2N1843	2.59	2N1844	3.20	2N1845	3.75	2N1846	4.41
16.0	C36U	2.24	C36F	2.59	C36A	3.20	C36G	3.75	C36B	4.41
25.0	C230U	3.75	C230F	4.10	C230A	4.77			C230B	5.49
25.0	231U	4.00	C231F	4.50	C231A	5.19			C231B	5.99
25.0	C232U	3.35	C232F	4.10	C232A. . .				C232B	4.95
25.0	C233U	3.75	C233F	4.10	C233A	4.65			C233B	5.45
25.0	C37U	2.47	C37F	2.85	C37A	3.60			C37B	4.87
25.0	N681	2.34	2N682	2.82	2N683	3.57	2N684	4.19	2N685	4.81
35.0	C35U	2.85	C35F	3.37	C35A	4.27	C35G	5.02	C35B	5.77
35.0	C38U	3.75	C38F	4.12	C38A	5.25	C38G	6.15	C38B	7.20
		1-9		**1-9**		**1-9**				**1-9**
55.0	C45U		C45F	**	C45A	16.50	C45G	17.00	C45B	17.50
55	C46U	**	C46	**	C46A	16.50	C46G	17.00	C46B	17.50
63.0					C147A	15.50			C147B	16.00
110.0	2N1909	16.50	2N1910	18.00	2N1911	19.50	2N1912	21.50	2N191	23.50
110.0	C52U	16.50	2N1792	18.00	2N1793	19.50	2N1794	21.50	2N1795	23.50
110.0	2N2023	22.00	2N2024	28.50	2N2025	32.50	2N2026	35.00	2N2027	35.00
110.0	C62U	22.00	C62F	28.50	C62A	32.50	C62G	35.00	C62B	35.00

*60 volts. **Consult factory.

25 to 500 VOLTS (Cont'd)

rms Current Amps	GE Type For Repetitive Peak Forward and Blocking Voltage of (Volts)							
	250	Net 1-99	300	Net 1-99	400	Net 1-99	500	Net 1-99
1.6	2N2327	$6.90	2N2328	$8.40	2N2329	$11.10		
1.6	2N1598	7.50	2N1599	9.90				
4.0			C106C	1.12				
4.0			C107C	.93				
7.4	2N1775A	7.57	2N1776A	8.47	2N1777A	9.45		
7.4	2N1775	6.37	2N1776	7.12	2N1777	7.87	2N1778	9.75
7.4			C220C	2.64	C220D	3.00	C220E	4.50
7.4			C222C	2.35	C222D	2.70	C222E	4.20
8.0			C15C	2.55	C15D	2.85	C15E	4.57
8.0					C122D	2.00	C122E	3.00
16.0	2N1847	4.90	2N1848	5.40	2N1849	6.16	2N1850	7.00
16.0	C36H	4.90	C36C	5.40	C36D	6.16	C36E	9.00
25.0			C230C	6.39	C230D	7.20	C230E	7.97
25.0			C231C	6.98	C231D	7.86	C231E	8.72
25.0			C232C	5.85	C232D	6.66	C232E	7.42
25.0			C233C	6.43	C233D	7.33	C233E	8.18
25.0			C37C	5.92	C37D	6.82	C37E	7.65
25.0	2N686	5.36	2N687	5.77	2N688	6.74	2N689	8.05
35.0	C35H	6.30	C35C	6.97	C35D	8.10	C35E	9.30
35.0	C38H	8.25	C38C	9.30	C38D	11.77	C38E	15.75
35.0			....				C137E	9.75
		1-9		**1-9**		**1-9**		**1-9**
55.0	C45H	18.50	C45C	19.50	C45D	22.50	C45E	33.50
55.0	C46H	18.50	C46C	19.50	C46D	22.50	C46E	33.50
63.0			C147C	16.50	C147D	18.00	C147E	20.00
110.0	2N1914	26.00	2N1915	27.50	2N1916	32.00	C50E	44.00
110.0	2N1796	26.00	2N1797	27.50	2N1798	32.00	C52E	44.00
110.0			....				C150E	36.00
110.0			....				C152E	36.00
110.0	2N2028	36.00	2N2029	37.00	2N2030	40.00	C60E	55.50
110.0	C62H	36.00	C62C	37.00	C62D	40.00	C62E	55.50

GENERAL ELECTRIC

Silicon Controlled Rectifiers

SCR's FOR PHASE CONTROL

600 VOLTS TO 1200 VOLTS

rms Current Amps	GE Type For Repetitive Peak Forward and Blocking Voltage of (Volts)											
	600	Net 1-99	700	Net 1-99	800	Net 1-99	1000	Net 1-99	1100	Net 1-99	1200	Net 1-99
25.0	C37M*	$8.40	C37S	$13.35	C37N	16.20	....		M3			
25.0		8.67	2N691	13.35	2N692	16.20	....		....			
35.0	C35M	10.20	C35S	13.35	C35N	16.20	....		....			
35.0	C137M	10.80	C137S	13.35	C137N	16.20	C137P	21.15	C137PA	23.40		
35.0	2N5204	9.30			2N5205	14.10	2N5206	18.45			2N5207	24.60
		1-9		1-9		1-9		1-9		1-9		1-9
55.0	C45M	45.50	C45S	54.00	C45N	65.00	....		....			
55.0	C46M	46.50	C46S	54.00	C46N	65.00	....		M3			
63.0	C147M	23.25	C147	27.00	C147N	31.00	C147P	39.00	C147PA	43.00	C147PB	47.00
110.0	C50M	55.50	C50S	67.00	C50N	81.00	....		....			
110.0	C52M	55.50	C52S	67.00	C52N	81.00	....		....			
110.0	C150M	40.00	C150S	46.00	C150N	50.00	C150P	60.00	C150PA	64.00	C150PB	69.00
110.0	C153M	40.00	C152S	46.00	C152N	50.00	152P	60.00	C152PA	64.00	C152PB	69.00
110.0			C60S				....		....			
110.0			C62S				....		....			

*Also available at 7.4 amps (600 volts); order by GE Type 2N2619

HIGH CURRENT SCR'S
FOR PHASE CONTROL

GE Type	Volts*	rms Amps	Net 1-9	GE Type	Volts*	rms Amps	Net 1-9	GE Type	Volts*	rms Amps	Net 1-9
C350A	100	180	**	C283N	800	400	110.00	C291PA	1100	470	158.00
350B	200	180	**	C283T	900	400	122.00	C291PB	1200	470	172.00
350C	300	180	$25.00	C283P	1000	400	133.00	C390E	500	850	114.00
350D	400	180	28.00	C283PA	1100	400	144.00	C390M	600	850	125.00
C350E	500	180	30.00	C283PB	1200	400	156.00	C390S	700	850	136.50
C350M	600	180	34.00	C283PC	1300	400	168.00	C390N	800	850	149.00
C350S	700	180	39.00	C283PD	1400	400	180.00	C390T	900	850	161.50
C350N	800	180	43.00	C283PE	1500	400	192.00	C390P	1000	850	173.50
C350T	900	180	47.00	C283PM	1600	400	204.00	C390PA	1100	850	187.00
C350P	1000	180	52.00	C283PS	1700	400	214.00	C390PB	1200	850	199.50
C350PA	1100	180	56.00	C286S	700	400	104.00	C501S	700	850	132.00
C350PB	1200	180	60.00	C286N	800	400	116.00	C501N	800	850	144.00
C350PC	1300	180	68.00	C286T	900	400	128.00	C501T	900	850	154.00
C180E	500	235	64.00	C286P	1000	400	142.00	C601P	1000	850	164.00
C180M	600	235	72.00	C286PA	1100	400	154.00	C501PA	1100	850	178.00
C180S	700	235	81.00	C286PB	1200	400	166.00	C501PB	1200	850	190.00
C180N	800	235	90.00	C286PC	1300	400	178.00	C501PC	1300	850	204.00
C180T	900	235	100.00	C286PD	1400	400	190.00	C501PD	1400	850	224.00
C180P	1000	235	108.00	C286PE	1500	400	202.00	C501PE	1500	850	244.00
C180PA	1100	235	118.00	C286PM	1600	400	214.00	C501PM	1600	850	262.00
C180PB	1200	235	128.00	C287S	700	400	104.00	C501PS	1700	850	280.00
C180PC	1300	235	138.00	C287N	800	400	116.00	C530A	100	1100	100.00
C280PC	1300	235	146.00	C287T	900	400	128.00	C530B	200	1100	110.00
C280PD	1400	235	156.00	C287P	1000	400	142.00	C530C	300	1100	121.00
C280PE	1500	235	166.00	C287PA	1000	400	$154.00	C530D	400	1100	132.00
C280PM	1600	235	176.00	C287PB	1200	400	166.00	C530E	500	1100	143.00
C280PS	1700	235	186.00	C287PC	1300	400	178.00	C530M	600	1100	154.00
C380A	100	380	32.00	C287PD	1400	400	190.00	C520A	100	1250	120.00
C380B	200	380	34.00	C287PE	1500	400	202.00	C520B	200	1250	132.00
C380C	300	380	38.00	C287PM	1600	400	214.00	C520C	300	1250	142.50
C380D	400	380	44.00	C290A	100	470	50.00	C520D	400	1250	154.00
C380E	500	380	52.00	C290B	200	470	59.00	C600E	500	1400	178.00
C380M	600	380	60.00	C290C	300	470	70.00	C600M	600	1400	196.00
C380S	700	380	68.00	C290D	400	470	80.00	C600S	700	1400	216.00
C380N	800	380	76.00	C290E	500	470	96.00	C600N	800	1400	234.00
C380T	900	380	84.00	C290M	600	470	108.00	C600T	900	1400	252.00
C380P	1000	380	92.00	C290S	700	470	118.00	C600P	1000	1400	270.00
C380PA	1100	380	102.00	C290N	800	470	128.00	C600PA	1100	1400	290.00
C380PB	1200	380	110.00	C290T	900	470	138.00	C600PB	1200	1400	308.00
C380PC	1300	380	118.00	C290P	1000	470	148.00	C601PA	1100	1100	240.00
C282S	700	400	98.00	C290PA	1100	470	158.00	C601PB	1200	1100	256.00
C282N	800	400	110.00	C290PB	1200	470	172.00	C601PC	1300	1100	270.00
C282T	900	400	122.00	C291A	100	470	50.00	C601PD	1400	1100	296.00
C282P	1000	400	133.00	C291B	200	470	59.00	C601PE	1500	1100	324.00
C282PA	1100	400	144.00	C291C	300	470	70.00	C601PM	1600	1100	352.00
C282PB	1200	400	156.00	C291D	400	470	80.00	C601PS	1700	1100	378.00
C282PC	1300	400	168.00	C291E	500	470	96.00	C701PA	1100	1950	384.00
C282PD	1400	400	180.00	C291M	600	470	108.00	C701PB	1200	1950	410.00
C282PE	1500	400	192.00	C291S	700	470	118.00	C701PD	1400	1950	474.00
C282PM	1600	400	204.00	C291N	800	470	128.00	C701PE	1500	1950	519.00
C282PS	1700	400	214.00	C291T	900	470	138.00	C701PM	1600	1950	563.00
C283S	700	400	98.00	C291P	1000	470	148.00	C701PS	1700	1950	605.00

*Repetitive peak forward and reverse voltage. **Contact Factory.

GENERAL ELECTRIC

SCR'S FOR INVERTERS

These SCR's are optimized for turn-off time (commutation speed), capability and other dynamic characteristics. Ideal for AC/DC inverters, choppers and other pulse applications requiring high speed capability.

GE Type	Volts‡	rms Amps	Net 1-9
C151E	500	110	51.50
C151M	600	110	58.00
C151S	700	110	64.00
C151N	800	110	71.50
C151T	900	110	81.00
C151P	1000	110	92.00
C154A	100	110	26.50
C154B	200	110	32.50
C154C	300	110	36.50
C154D	400	110	44.50
C154E	500	110	54.00
C156A	100	110	26.50
C156B	200	110	32.50
C156C	300	110	36.50
C156D	400	110	44.50
C156E	500	110	54.00
C155A	100	110	24.50
C155B	200	110	30.00
C155C	300	110	35.50
C155D	400	110	41.00
C155E	500	110	49.50
C155M	600	110	58.00
C157A	100	110	24.50
C157B	200	110	30.00
C157C	300	110	35.50
C157D	400	110	41.00
C157E	500	110	49.50
C157M	600	110	58.00
C158E	500	110	51.50
C158M	600	110	58.00
C158S	700	110	64.00
C158N	800	110	71.50
C158T	900	110	81.00
C158P	1000	110	92.00
C158PA	1100	110	108.00
C158PB	1200	110	132.00
C159E	500	110	51.50
C159M	600	110	58.00
C159S	700	110	64.00
C159N	800	110	71.50
C159T	900	110	81.00
C159P	1000	110	92.00
C159PA	1100	110	108.00
C159PB	1200	110	132.00
C354A	100	215	23.00
C354B	200	215	28.00
C354C	300	215	33.00
C354D	400	215	38.00
C354E	500	215	50.00
C354M	600	215	54.50
C355A	100	215	21.00
C355B	200	215	26.00
C355C	300	215	30.00
C355D	400	215	35.00
C355E	500	215	42.00
C355M	600	215	49.00
C358E	500	225	44.00
C358M	600	225	49.50
C358S	700	225	54.50
C358N	800	225	61.00
C358T	900	225	70.00
C358P	1000	225	81.00
C358PA	1100	225	94.00
C358PB	1200	225	120.00
C185A	100	300	54.00
C185B	200	300	58.00
C185C	300	300	64.00
C185D	400	300	72.00
C185E	500	300	84.00
C185M	600	300	98.00
C364A	100	275	36.50
C364B	200	275	42.00
C364C	300	275	48.00
C364D	400	275	53.50
C364E	500	275	60.50
C364M	600*	275	67.00
C365A	100	275	31.50
C365B	200	275	33.50
C365C	300	275	39.50
C365D	400	275	41.50
C365E	500	275	48.00
C365M	600	275	53.50
C385A	100	400	48.00
C385B	200	400	52.00
C385C	300	400	56.00
C385C	400	400	64.00
C385E	500	400	76.00
C385M	600	400	88.00
C387E	500	550	114.00
C387N	600	550	128.00
C387S	700	550	148.00
C387N	800	550	164.00
C387T	900	550	180.00
C387P	1000	550	198.00
C387PA	1100	550	216.00
C387PB	1200	550	232.00
C388E	500	550	126.00
C388M	600	550	144.00
C388S	700	550	166.00
C388N	800	550	184.00
C388T	900	550	204.00
C388P	1000	550	224.00
C388PA	1100	550	244.00
C388PB	1200	550	260.00
C397E	500	700	126.00
C397M	600	700	144.00
C397S	700	700	166.00
C397N	800	700	184.00
C397T	900	700	204.00
C397P	1000	700	224.00
C397PA	1100	700	244.00
C397PB	1200	700	260.00
C398E	500	700	140.00
C398M	600	700	160.00
C398S	700	700	184.00
C398N	800	700	204.00
C398T	900	700	226.00
C398P	1000	700	248.00
C398PA	1100	700	270.00
C398PB	1200	700	290.00
C392A	100	500	107.00
C392B	200	500	115.00
C392C	300	500	121.00
C392D	400	500	128.00
C392E	500	500	136.00
C392M	600	500	156.00
C393A	100	500	99.00
393B	200	500	107.00
C393C	300	500	115.00
C393D	400	500	122.00
C393E	500	500	130.00
C393M	600	500	146.00
C394A	100	700	132.00
C394B	200	700	141.00
C394C	300	700	150.00
C394D	400	700	159.00
C394E	500	700	168.00
C394M	600	700	192.00
C395A	100	700	122.00
C395B	200	700	130.00
C395C	300	700	138.00
C395D	400	700	145.00
C395E	500	700	152.00
C395M	600	700	176.00
C509S	700	775	132.00
C509N	800	775	224.00
C509T	900	775	154.00
C509P	1000	775	274.00
C509PA	1100	775	298.00
C509PB	1200	775	320.00
C609S	700	1000	242.00
C609N	800	1000	270.00
C609T	900	1000	298.00
C609P	1000	1000	324.00
C609PA	1100	1000	358.00
C609PB	1200	1000	384.00

*Also available as 2N3649, 50, 51, 52, and 53. †Also available as 2N3654, 55, 56, 57, and 58. ‡Repetitive peak forward and reverse voltage.

Solid State Lamps see page 196

GENERAL ELECTRIC

SILICON SIGNAL DIODES (DO-35 PACKAGE)

GE Type	Min. BV V	Min. BV µA	VF at IF V	VF at IF mA	Max. IR at 25 C nA	Max. IR at 25 C V	Max. Cap. at 0 V pF	Net 1-99
1N914	100	100	1.0	10	25	20	4	$.30
1N914A	100	100	1.0	20	25	20	4	.40
1N914B	100	100	1.0	100	25	20	4	.80
1N916	100	100	1.0	10	25	20	2	.52
1N916A	100	100	1.0	20	25	20	2	.58
1N916B	100	100	1.0	30	25	20	2	1.07
1N4148*	100	100	1.0	10	25	20	4	.30
1N4149	100	100	1.0	10	25	20	2	.52
1N4150*	50	1	1.0	200	100	50	2.5	2.10
1N4151	75	5	1.0	50	50	50	2	.75
1N4152	40	5	0.88	20	50	30	2	.60
1N4153*	75	5	0.88	20	50	50	2	.75
1N4154	35	5	1.0	30	100	25	4	.33
1N4305	75	5	0.85	10	100	50	2	.60
1N4444	70	5	1.0	100	50	50	2	1.51
1N4446	100	100	1.0	20	25	20	4	.36
1N4447	100	100	1.0	20	25	20	2	.58
1N4448	100	100	1.0	100	25	20	4	.75
1N4449	100	100	1.0	30	25	20	2	1.07
1N4450	40	5	1.0	200	50	30	4	1.45
1N4451	40	5	1.0	300	50	30	6	1.28
1N4454*	75	5	1.0	10	100	50	2	.24
1N4606	85	100	1.0	200	100	50	4	1.20
1N4607	85	100	1.0	350	100	50	4	1.31
1N4608	85	100	1.0	450	100	50	4	1.44
1N4727	30	5	0.85	10	100	20	4	.40
1N4863	70	5	1.2	100	50	50	2	1.02
1N4864	125	100	1.1	100	100	80	1.3	1.37
DZ800	2	5	0.8	10	2#	2	4	.14
DZ805	15	5	0.8	10	2#	12	4	.15
DZ806	25	5	0.8	10	2#	22	4	.17
DA1701	100	100	1.0	50	50	50	1	.30
DA1702	75	5	1.0	50	50	50	1	.26
DA1703	40	5	1.0	50	50	30	2	.24
DA1704	25	5	1.1	50	100	20	3	.23
DT230A	100		1.1	250	1000	250	5	.26
DT230B	200		1.1	250	1000	250	5	.30
DT230F	50		1.1	250	1000	250	5	.24
DT230G	150		1.1	250	1000	250	5	.29
DT230H	250		1.0	200	1000	250	5	.36
DT230H1	250		1.1	250	1000	250	5	.33

*JAN and JANTX type available. †IF=10 mA, IR=1 mA, recovery to 0.1 mA. ‡IF=IR=10 mA, recovery to 1.0 mA. § Qs=40 pC. #µA.

MULTIPELLET STABISTORS

Power dissipation=400 mW. Derate 2.67 mW/° C for TA above 25° C. Capacitance value at f=1 MHz.

GE Type	Min. BV V	Min. BV µA	Max. VR V	VF IF 10 mA V	Max. IR at 25 C nA	Max. IR at 25 C V	Net 1-99
1N4156	30	5	20	1.38-1.58	50	20	$.75
1N4157	30	5	20	2.12-2.32	50	20	1.04
1N4453	30	5	20	.690-.800	50	20	.54
1N4829	30	100	20	1.16-1.61	100	20	.69
1N4830	30	100	20	1.90-2.35	100	20	.93
1N5179	30	5	20	2.60-3.20	50	20	1.32
MPD200	30	5	30	1.39-1.54	30	30	1.21
MPD300	60	5	60	2.10-2.33	30	30	1.49
MPD400	90	5	90	2.80-3.07	30	30	1.62
STB567	12	5	12	1.31-1.61			.48
STB568	12	5	12	2.09-2.31			.64
STB569	12	5	20	2.72-3.01			.81

MHD

Milli heatsink diodes rated 500 mW at 25° C free air.

GE Type	DHD Type	NET 1-99	GE Type	DHD Type	NET 1-99
1N4531*	1N914	$.45	MA1701	DA1701	$.31
1N4532	1N4454	.65	MA1702	DA1702	.27
1N4533	1N4152	.69	MA1703	DA1703	.25
1N4534	1N4153	1.00	MA1704	DA1704	.24
1N4536	1N4154	.42			

*JAN and JANTX types available.

TO-98 plastic packaged devices engineered to deliver excellent performance with maximum value. NPN construction except as otherwise noted. All TO-98 devices can be supplied with leads formed to fit either a TO-5 or TO-18 socket; prices on request.

SMALL SIGNAL AMPLIFIERS

AUDIO TO 30 MHz

PT 360 mW.

GE Type	hFE IC 2 mA	VCEO V	Typ. VCE(SAT) V	NF dB	NET 1-99
2N2711	30-90	18	0.2		$.41
2N2712	75-225	18	0.2		.41
2N2923	90-180	25	0.2	15†	.29
2N2924	150-300	25	0.2	15†	.32
2N2925	235-470	25	0.2	15†	.38
2N2926*	35-470	18	0.2		.27
2N3390	400-800	25	0.2		.95
2N3391	250-500	25	0.2	1.9	.43
2N3391A	250-500	25	0.2	5.0	.47
2N3392	150-300	25	0.2	15†	.29
2N3393	90-180	25	0.2	15†	.29
2N3394	55-110	25	0.2	15†	.27
2N3395*	150-500	25	0.2		.50
2N3396*	90-500	25	0.2		.50
2N3397*	55-500	25	0.2		.47
2N3398*	55-800	25	0.2		.54
2N3721	60-660	18	0.2		.41
2N3900	250-500	18	0.2	1.9	.41
2N3900A	250-500	18	0.2	5.0	.45
2N3901	350-700	18	0.2	5.0	1.06
2N5172	100-500	25	0.25‡		.22
2N5998	150-300	25	0.1	0.5	.47
2N5999#	150-300	25	0.1	0.5	.50
2N6008	250-500	25	0.1	0.5	.52
2N6009#	250-500	25	0.1	0.5	.54

*Supplied in narrow spread, distinctively color-coded beta groups.

†Input impedance, ohms. ‡Maximum. #PNP.

HIGH FREQUENCY AMPLIFIERS AND OSCILLATORS

262.5 kHz TO 100 MHz EPITAXIAL

GE Type	hFE IC 2 mA	VCEO V	Typ. VCE(SAT) V	Max. NF dB	Net 1-99
2N3843	20-40	30	0.065	10.2	$.43
2N3843A	20-40	30	0.065	8.5	.45
2N3844	35-70	30	0.065	10.2	.45
2N3844A	35-70	30	0.065	8.6	.47
2N3845	60-120	30	0.065	10.2	.47
2N3845A	60-120	30	0.065	8.5	.50
2N3854	35-70	18	0.085		.34
2N3854A	35-70	30	0.085	16*	.36
2N3855	60-120	18	0.085	16*	.36
2N3855A	60-120	30	0.085	16*	.38
2N3856	100-200	18	0.085	16*	.38
2N3856A	100-200	30	0.085	16*	.41
2N3858	60-120	30	0.055	10*	.27
2N3859	100-200	30	0.055	10*	.29
2N3860	150-300	30	0.055	10*	.32
2N5232	250-500	50	0.055		.34
2N5232A	250-500	50	0.055	5	.38
2N5249	400-800	50	0.055		.50
2N5249A	400-800	50	0.055	5	.54
2N5309	60-120§	50	0.055		.56
2N5310	100-300§	50	0.055		.63
2N5311	250-500§	50	0.055		.74

100 MHz TO 950 MHz EPITAXIAL

GE Type	hFE IC 2 mA	VCEO V	Typ. VCE(SAT) V	Max. NF dB	Net 1-99
2N3662	20 min.†	12	0.6‡	4	$.52
2N3663	20 min.†	12	0.6‡	4	.56
D16G6	20 min.#	12	0.6‡	4	.45

*Cib. pF. †IC=8 mA, VCE=10 V. ‡Maximum. §IC=10 µA. #IC=5 mA, VCE=10 V.

HIGH SPEED SWITCHES

Low storage times; epitaxial gold doped.

GE Type	hFE IC 10 mA	VCEO V	Max. VCE(SAT) V	PT mW	NET 1-99
2N3605	30 min	14	0.25	360	$.45
2N3605A	30-120	15	0.25	360	.45
2N3606	30 min	14	0.25	360	.37
2N3606A	30-120	15	0.25	360	.37
2N3607	30 min	14	0.25	360	.27

TYPE D13V

INTEGRATED VOLTAGE REGULATOR (IVR)

The IVR consists of two NPN transistors, a zener diode and a resistor on a monolithic chip mounted in a TO-98 three-lead plastic package. It is designed for use as a shunt voltage regulating element and reference amplifier with simple resistor programming. Characteristics: Regulated Voltage Range: 10 volts min.: 40 volts max. TC of Regulated Voltage: 0.3%/°C typ.; 0.1%/°C max. Thevenin Impedance: 10 ohms typ.; 50 ohms max. Thevenin Reference Voltage: 8.5 volts typ.: 10 volts max. Total Average Power: 400 mW. Voltage: 8.5 volts typ.: 10 volts max. Total Average Power: 400 mW.

GENERAL ELECTRIC

SILICON POWER TRANSISTORS

SILICON POWER TAB TRANSISTORS

D40D/D41D, D40E/D41E, D42C/D43C are complementary; D40N and D40P applications in CRT video output, regulators, inverters. D40C, D40D, D40E, D40K, D41D, D41E, D42C, D43C applications as audio output. 3 watts to 20 watts; regulators, drivers, inverters, motor controls, lamp controls and relays.

NPN hFE at VCE=5 V and IC=200 mA. VCE(SAT) at IC=500 mA and IB=0.5 mA. PT at 25° C tab. ft MHz 75

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D40C1	10K-60K	30	0.5	1.0	1.5	5	6.25	$.64
D40C2	40K min.	30	0.5	1.0	1.5	5	6.25	.89
D40C3	90K min.	30	0.5	1.0	1.5	5	6.25	1.00
D40C4	10K-60K	40	0.5	1.0	1.5	5	6.25	.71
D40C5	40K min.	40	0.5	1.0	1.5	5	6.25	1.02
D40C7	10K-60K	50	0.5	1.0	1.5	5	6.25	1.02
D40C8	40K min.	50	0.5	1.0	1.5	5	6.25	1.28

NPN hFE at VCE=5 V and IC=200 mA. VCE(SAT) at IC=1.5 amps and IB=3 mA. PT at 25° C tab.

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D40K1	10K min.	30	1.5	2.5	1.5	5	10	1.02

NPN hFE at VCE=10 V and IC=20 mA. PT at 25° C tab.

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D40N1	30-90	250	0.1	0.2		3	6.25	.82
D40N2	60-180	250	0.1	0.2		3	6.25	.84
D40N3	30-90	300	0.1	0.2		3	6.25	.90
D40N4	60-180	300	0.1	0.2		3	6.25	.92
D40N5	20 min.	375	0.1	0.2		3	6.25	.71

NPN hFE at VCE=2 V and IC=100 mA. VCE(SAT) at IC=500 mA and IB=50 mA. PT at 25° C tab. ft MHz 20.

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D40D1	50-150	30	1.0	1.5	0.5	8	6.25	.61
D40D2*	120-360	30	1.0	1.5	0.5	8	6.25	.77
D40D3	290 min.	30	1.0	1.5	0.5	8	6.25	.82
D40D4	50-150	45	1.0	1.5	0.5	8	6.25	.74
D40D5	120-360	45	1.0	1.5	0.5	8	6.25	.90
D40D7	50-150	60	1.0	1.5	1.0	8	6.25	.82
D40D8	120-360	60	1.0	1.5	1.0	8	6.25	1.02
D40D10	50-150	75	1.0	1.5	1.0	8	6.25	.97
D40D11	120-360	75	1.0	1.5	1.0	8	6.25	1.12
D40D13	50-150	75	1.0	1.5	1.0	8	6.25	.82
D40D14	120-360	75	1.0	1.5	1.0	8	6.25	1.02

NPN hFE at VCE=2 V and IC=100 mA. PT at TC=25° C.

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D40E1	50 min.†	30	2				8	.67
D40E5	50 min.†	60	2				8	.82
D40E7	50 min.†	80	2				8	1.07

NPN hFE at CE=10 V and IC=80 mA. VCE(SAT) at IC=100 mA and IB=10 mA. PT at 25° C tab. ft MHz 50

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D40P1	D40 min.*	120	0.5	1.0	1.0	6	6.25	.92
D40P3	40 min.*	180	0.5	1.0	1.0	6	6.25	1.02
D40P5	40 min.*	225	0.5	1.0	1.0	6	6.25	1.25

PNP hFE at VCE=2 V and IC=100 mA. VCE(SAT) at IC=-500 mA and IB=-50 mA. PT at 25° C tab. ft MHz 150

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D41D1	50-150	-30	-1.0	-1.5	-0.5	10	6.25	.66
D41D2	120-360	-30	-1.0	-1.5	-0.5	10	6.25	.87
D41D4	50-150	-45	-1.0	-1.5	-0.5	10	6.25	.79
D41D5	120-360	-45	-1.0	-1.5	-0.5	10	6.25	1.00
D41D7	50-150	-60	-1.0	-1.5	-1.0	10	6.25	.87
D41D8	120-360	-60	-1.0	-1.5	-1.0	10	6.25	1.13
D41D10	50-150	-75	-1.0	-1.5	-1.0	10	6.25	1.04
D41D11	120-360	-75	-1.0	-1.5	-1.0	10	6.25	1.20
D41D13	50-150	-75	-1.0	-1.5	-1.0	10	6.25	.87
D41D14	120-360	-75	-1.0	-1.5	-1.0	10	6.25	1.10

PNP hFE at VCE=2 V and IC=100 mA. PT at TC=25° C.

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D41E1	50 min.†	-30	2				8	.72
D41E5	50 min.†	-60	2				8	.92
D41E7	50 min.†	-80	2				8	1.15

*20 when measured at 2 mA collector current. †10 at VCE=2 V and IC=1 A.

NPN hFE at VCE=1 V and IC=200 mA. VCE(SAT) at IC=1 A and IB=50 mA. PT at 25° C tab. ft MHz 50

GE Type	hFE	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D42C1	25 min.	30	3.0	5.0	0.5	100	12.5	$.90
D42C2	40-120	30	3.0	5.0	0.5	100	12.5	.95
D42C3†	40-120	30	3.0	5.0	0.5	100	12.5	1.00
D42C4	25 min.	45	3.0	5.0	0.5	100	12.5	.97
D42C5	40-120	45	3.0	5.0	0.5	100	12.5	1.02
D42C6†	40-120	45	3.0	5.0	0.5	100	12.5	1.10
D42C7	25 min.	60	3.0	5.0	0.5	100	12.5	1.10

POWER TAB TRANSISTORS (CONT'D)

GE Type	hFF§	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D42C8	40-120	60	3.0	5.0	0.5	100	12.5	1.17
D42C9†	40-120	60	3.0	5.0	0.5	100	12.5	1.20
D42C10	25 min.	80	3.0	5.0	0.5	100	12.5	1.18
D42C11*	40-120	80	3.0	5.0	0.5	100	12.5	1.23
D42C12†	40-120	80	3.0	5.0	0.5	100	12.5	1.32

NPN hFE at, VCE=10 V and IC=500 mA. VCE(SAT) at IC=500 mA and IB=50 mA. PT at 25° C.

GE Type	hFF§	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D42R1	30 min.	250	1.0	2.0	1.0	30	15	1.08
D42R2	30 min.	300	1.0	2.0	1.0	30	15	1.13

PNP hFE at VCE =-1 V and IC= -200 mA. VCE(SAT) at IC= -1 A and IB= -50 mA. PT at 25° C tab. ft MHz 40

GE Type	hFF§	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D43C1	25 min.	-30	-3.0	-5.0	-0.5	125	12.5	1.02
D43C2	40-120	-30	-3.0	-5.0	-0.5	125	12.5	1.07
D43C3†	40-120	-30	-3.0	-5.0	-0.5	125	12.5	1.12
D43C4	25 min.	-45	-3.0	-5.0	-0.5	125	12.5	1.10
D43C5	40-120	-45	-3.0	-5.0	-0.5	125	12.5	1.15
D43C6†	40-120	-45	-3.0	-5.0	-0.5	125	12.5	1.22
D43C7	25 min.	-60	-3.0	-5.0	-0.5	125	12.5	1.22
D43C8	40-120	-60	-3.0	-5.0	-0.5	125	12.5	1.30
D43C9†	40-120	-60	-3.0	-5.0	-0.5	125	12.5	1.33
D43C10	25 min.	-80	-3.0	-5.0	-0.5	125	12.5	1.30
D43C11*	40-120	-80	-3.0	-5.0	-0.5	125	12.5	1.33
D43C12†	40-120	-80	-3.0	-5.0	-0.5	125	12.5	1.41

SILICON POWER PAC TRANSISTORS

D44C/D45C and D44H/D45H are complementary. Application as audio output, regulators, drivers, inverters, motor and lamp controls and relays. D44R and D44Q applications include 120 VAC line operated amplifiers; low thru high frequency inverters/converters; TV and other display tube deflection and many others.

NPN hFE at VCE=1 V and IC=200 mA. VCE(SAT) at IC=1 A and IB=50 mA. PT at 25° C tab. ft MHz 50

GE Type	hFE§	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D44C1	25 min.	30	4.0	6.0	0.5	100	30.0	.97
D44C2	40-120	30	4.0	6.0	0.5	100	30.0	1.02
D44C3†	40-120	30	4.0	6.0	0.5	100	30.0	1.07
D44C4	25 min.	45	4.0	6.0	0.5	100	30.0	1.05
D44C5	40-120	45	4.0	6.0	0.5	100	30.0	1.10
D44C6†	40-120	45	4.0	6.0	0.5	100	30.0	1.17
D44C7	25 min.	60	4.0	6.0	0.5	100	30.0	1.17
D44C8	40-120	60	4.0	6.0	0.5	100	30.0	1.25
D44C9†	40-12	60	4.0	6.0	0.5	100	30.0	1.28
D44C10	25 min.	80	4.0	6.0	0.5	100	30.0	1.25
D44C11*	40-120	80	4.0	6.0	0.5	100	30.0	1.30
D44C12†	40-120	80	4.0	6.0	0.5	100	30.0	1.37

NPN hFE at VCE=10 V and IC=2 amps. VCE(SAT) at IC=2 amps and IB=200 mA. PT at 25° C tab. ft MHz 50

GE Type	hFE§	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D44Q1	20 min.‡	125	4.0	8.0	1.0	40	31.25	1.54
D44Q3	20 min.‡	175	4.0	8.0	1.0	40	31.25	1.64
D44Q5	20 min.‡	225	4.0	8.0	1.0	40	31.25	1.74

NPN hFE at VCE=10 V and IC=500 mA. VCE(SAT) at IC=500 mA and IB=50 mA. PT at 25° C tab. ft MHz 40

GE Type	hFE§	Min. VCEO V	IC Cont. A	IC Peak A	Max. VCE (SAT) V	CCBO pF	PT W	NET 1-99
D44R1	30-90	250	1.0	2.0	1.0	30	31.25	1.28
D44R2	75-175	250	1.0	2.0	1.0	30	31.25	1.38
D44R3	30-90	300	1.0	2.0	1.0	30	31.25	1.38
D44R4	75-175	300	1.0	2.0	1.0	30	31.25	1.48
D44R5	30 min.	250	1.0	2.0	1.0*	30	31.25	1.22
D44R6	30 min.	300	1.0	2.0	1.0*	30	31.25	1.33
D44R7	150-300	250	1.0	2.0	1.0	30	31.25	1.43
D44R8	150-300	300	1.0	2.0	1.0	30	31.25	1.58

*hFE=20 min. at 2 V, 1 A; all others =10 min. †hFE =20 min. when measured at IC=2 A. ‡hFE=20 min. at 10 V, 2 A. §hFE=20 min. at 1 V, 1 A on parts 2, 5, 8, 11; hFE=10 min. at 1 V, 1 A on parts 1, 4, 7, 10, 100. VCE(SAT) on parts 1, 4, 7, 10 is measured at 1 A, 100 mA. *VCE(SAT) measured at IC=300 mA and Ib=30 mA.

GENERAL ELECTRIC

NPN AND PNP SILICON SIGNAL TRANSISTORS

NPN LARGE SIGNAL AMPLIFIERS AND MEDIUM SPEED SWITCHES—EPITAXIAL (TO-98)

GE Type	hFE IC 2 mA	VCEO V	Max. VCE(SAT) V	PT mW	Net 1-99
2N2713	30-90	18	0.3	360	$.41
2N2714	75-225	18	0.3	360	.45
2N3402*	75-225	25	0.3	900	.36
2N3403*	180-540	25	0.3	900	.38
2N3404*	75-225	50	0.3	900	.50
2N3405*	180-540	50	0.3	900	.61
2N3414	75-225	25	0.3	360	.344
2N3415	180-540	25	0.3	360	.369
2N3416	75-225	50	0.3	360	.45
2N3417	180-540	50	0.3	360	.56
2N4256	100-500	30†	0.25	360	.68
2N4424	180-540	40	0.3	360	.43
2N4425*	180-540	40	0.3	900	.47
2N5418	40-120	25	0.25	360	.32
2N5419	100-300	25	0.25	360	.36
2N5420	250-500	25	0.25	360	.43

*TO-98 in heat sink. †VCES value. ‡IC = 50 mA.

NPN DARLINGTON AMPLIFIERS (TO-98)

Monolithic Darlington amplifiers ideal for preamplifier input stages requiring high input impedances of several megohms. Available with heatsink which raises PT to 560 mW. hie value at f 1 kHz.

GE Type	hFE IC 2 mA VCE 5 V	Min. BVCEO V	Max. hie IC 2 mA VCE 5 V	PT at 25 C mW	Net 1-99
D16P1	2,000 min.	12	400K ohms	400	$.38
2N5305	2,000-20,000	25	500K ohms	400	.45
2N5306	7,000-70,000	25	500K ohms	400	.43
2N5306A†	7,000-70,000	25	500K ohms	400	.50
2N5307	2,000-20,000	40	600K ohms	400	.47
2N5308	7,000-70,000	40	600K ohms	400	.52
2N5308A†	7,000-70,000	40	600K ohms	400	.59

†Low noise versions.

PNP DARLINGTON AMPLIFIERS (TO-18)

GE Type	hFE IC 2 mA VCE 5 V	VCEO V	Max. VCE(SAT) IC 500 mA	PT at 25 C mW	Net 1-99
D34C1	2K-20K	40	1.75	300	$.78
D34C2	7K-70K	40	1.75	500	.81
D34C3	50K	40	1.75	500	.96
D34C4	2K-20K	25	1.75	500	.68
D34C5	7K-70K	25	1.75	500	.81
D34C6	50K	25	1.75	500	.78

PNP SILICON TRANSISTORS (TO-98)

GE Type	hFE	VCEO V	PT mW	VCE(SAT) V	Net 1-99
2N5354	40-120	25	360	.25	$.36
2N5355	100-300	25	360	.25	.41
2N5356	250-500	25	360	.25	.47
2N5365	40-120	40	360	.25	.45
2N5366	100-300	40	360	.25	.50
2N5367	250-500	40	360	.25	.56
D29A12	250-500	60	360	.25	

NPN HIGH VOLTAGE APPLICATIONS (TO-98)

GE Type	hFE IC 2 mA	VCEO V	Max. VCE(SAT) V	PT mW	Net 1-99
2N3858A	60-120	60	0.25	360	$.34
2N3859A	100-200	60	0.25	360	.36
2N3877	20 min.	70	1.0	360	.45
2N3877A	20 min.	85	1.0	360	.52
2N5174	40-600*	75	0.95	360	.65
2N5175	55-160*	100	0.95	360	.70
2N5176	140-300*	100	0.95	360	.74

*IC =10 mA.

NPN HIGH VOLTAGE APPLICATIONS (TO-18)

2N6218	20	300	1	500	.68
2N6219	20	250	1	500	.65
2N6220	20	200	1	500	.63
2N6221	20	150	1	500	.56

NPN-PNP PAIRS

TO-18

GE Type Polarity NPN	GE Type Polarity PNP	hFE IC 2 mA	VCEO V	Max. VCE(SAT) V	Net 1-99
2N5810		60-200	25	0.75	$.36
	2N5811	60-200	25	0.75	.41
2N5812		150-500	25	0.75	.38
	2N5813	150-500	25	0.75	.45
2N5814		60-120	40	0.75	.38
	2N5815	60-120	40	0.75	.38
2N5816		100-200	40	0.75	.41
	2N5817	100-200	40	0.75	.41
2N5818		150-300	40	0.75	.43
	2N5819	150-300	40	0.75	.45
2N5820		60-120	60	0.75	.49
	2N5821	60-120	60	0.75	.68
2N5822		100-200	60	0.75	.62
	2N5823	100-200	60	0.75	.70
2N6000		100-300*	25	0.175†	.54
	2N6001	100-300*	25	0.175†	.56
2N6002		250-500*	25	0.175†	.59
	2N6003	250-500*	25	0.175†	.59
2N6004		100-300*	40	0.175†	.59
	2N6005	100-300*	40	0.175†	.59
2N6006		250-500*	40	0.175†	.72
	2N6007	250-500*	40	0.175†	.77
2N6010		100-300*	40	0.130‡	.68
	2N6011	100-300*	40	0.130‡	.70
2N6012		250-500*	40	0.130‡	.72
	2N6013	250-500*	40	0.130‡	.74
2N6014		100-300*	60	0.130‡	.72
	2N6015	100-300*	60	0.130‡	.74

*IC = 10 mA. †NPN; PNP, 0.350 V. ‡NPN: PNP, 0.300 V.

GENERAL PURPOSE AMPLIFIERS AND SWITCHES

GE Type	hFE at IC Min.-Max.	hFE at IC mA	VCEO V	Max. VCE(SAT) V	Net 1-99
GET929	60-120	10*	50	.125	$.37
GET930	100-300	100*	50	.125	.37
GET2221	40-120	150	30	.300	.30
GET2221A	40-120	150	40	.300	.41
GET2222	100-300	150	30	.300	.41
GET2222A	100-300	150	40	.300	.46
GET2484	250 min.	1	60	.350	.26
GET3638†	20 min.	1	25	.250	.24
GET3638A†	100 min.	10	25	.250	.27
2N5824	60-120	2	40	.125	.25
2N5825	100-300	2	40	.125	.27
2N5826	150-450	2	40	.125	.29
2N5827	250-500	2	40	.125	.32
2N5828	400-800	2	40	.125	.34

*μA. †PNP.

SILICON PLANAR EPITAXIAL PASSIVATED

NPN MICROTAB

PT = 90 mW. Cob value at f = 1 MHz.

GE Type	hFE at IC		Maximum				NET 1-99
	Min.-Max.	μA	VCEO V	VEBO V	VCBO V	VCE (SAT) V	
D26B1	20-60	10*	15	4.5	40	0.25	
D26B2	40-120	10*	15	4.5	40	.25	
D26C1	30-90	10*	18	5	18	0.2	.76
D26C2	60-180	10*	18	5	18	0.2	.80
D26C3	140-300	10*	18	5	18	0.2	.85
D26C4	250-500	10*	18	5	18	0.25	1.15
D26C5	400-800	10*	18	5	18	0.25	1.33
D26E1	100-300	10	45	5	45	1.00	1.35
D26E2	40-90	100	18	5	18	.25	.82
D26E3	70-145	100	18	5	18	.25	.86
D26E4	115-220	100	18	5	18	.25	.89
D26E5	180-330	100	18	5	18	.25	.93
D26E6	40-330	100	18	5	18	.25	.75
D26G1	20 min.	3*	15	3	30	.4	1.02

*mA. †ton = 12 nsec max.; toff = 15 nsec max. ‡ton = 12 nsec max.; toff = 18 nsec max.

PNP MICROTAB

PT = 90 mW.

GE Type	hFE at IC		Maximum				NET 1-99
	Min.-Max.	mA	VCEO V	VEBO V	VCBO V	VCE (SAT) V	
D30A1	30-90	10	-18	-4	-18	-.25	$1.16
D30A2	60-180	10	-18	-4	-18	-.25	1.20
D30A3	140-300	10	-18	-4	-18	-.25	1.28
D30A4	250-500	10	-18	-4	-18	-.25	1.73
D30A5	400-800	10	-18	-4	-18	-.25	2.00

GENERAL ELECTRIC

GE-MOV METAL OXIDE VARISTORS

GE-MOV Varistors are voltage dependant symmetrical resistors which perform in a manner similar to back-to-back zener diodes in circuit protective functions and offer advantages in performance and economies. When exposed to high energy voltage transient, varistor impedance changes from a very high standby value to a very low conducting value thus clamping the line voltage to a safe level Dangerous energy of incoming high voltage pulse is absorbed by the GE-MOV varistor, thus protecting your voltage sensitive circuit components Eliminates follow-on currents extends contact life and protects circuit insulation. Applications include component and system voltage transient protection in inductive and transformer switching circuits, regenerative loads, switching magnetic amplifiers: contact arc suppression-reduction of lightning effects. If nonsinusoidal wave input is present, peak voltage input values should be use to select model.

TYPE POWER-MOVTM VARISTORS

Power Dissipation: Up to 15 watts at 70° C tab temperature. Idle Power Dissipation: Less than 1 watt. Clamp Ratio: 1.7-1.9 at 10 amps. Current: Can handle up to 2000 amps. Voltage Rating: 130-575 volts rms and 170-780 VDC. Energy Rating: 10-80 joules. Response Time: Less than 50 nsec. Meets NEMA creep and strike-terminal distances. Comes with outer disconnect terminals.

GE Type	Applied Max. rms Volts	Applied DC Volts*	Max. Energy Joules	Max. Avg. Watts†	Net 1-99
V130PA10A	130	170	10	8	$3.94
V130PA20A	130	170	20	15	4.70
V130PA20B	130	170	20	15	4.95
V130PA20C	130	170	20	15	5.18
V150PA10A	150	215	10	8	3.94
V150PA20A	150	215	20	15	4.70
V150PA20B	150	215	20	15	4.95
V150PA20C	150	215	20	15	5.18
V250PA10A	250	330	10	4	3.94
V250PA20A	250	330	20	7	4.70
V250PA40A	250	330	40	13	6.23
V250PA40B	250	330	40	13	6.55
V250PA40C	250	330	40	13	6.86
V275PA10A	275	360	10	4	3.94
V275PA20A	275	360	20	7	4.70
V275PA40A	275	360	40	13	6.23
V275PA40B	275	360	40	13	6.55
V275PA40C	275	360	40	13	6.86
V420PA20A	420	550	20	5	6.35
V420PA40A	420	550	10	10	7.88
V420PA40B	420	550	40	10	8.28
V420PA40C	420	550	40	10	8.66
V460PA20A	460	625	20	5	6.35
V460PA40A	460	625	40	10	7.88
460PA40B	460	625	40	10	8.28
V460PA40C	460	625	40	10	8.66
V480PA20A	480	625	20	3	6.35
V480PA40A	480	625	40	5	7.88
V480PA80A	480	625	80	10	10.94
V480PA80B	480	625	80	10	11.59
V480PA80C	480	625	80	10	12.04
V510PA20A	510	655	20	3	6.62
V510PA40A	510	655	40	5	8.15
V510PA80A	510	655	80	10	11.21
V510PA80B	510	655	80	10	11.77
V510PA80C	510	655	80	10	12.33
V550PA20A	550	755	20	3	6.62
V550PA40A	550	755	40	5	8.15
V550PA80A	550	755	80	9	11.21
V550PA80B	550	755	80	9	11.77
V550PA80C	550	755	80	9	12.33
V575PA20A	575	780	20	3	6.62
V575PA40A	575	780	40	5	8.15
V575PA80A	575	780	80	9	11.21
V575PA80B	575	780	80	9	11.77
V575PA80C	575	780	80	9	12.33

*For 1 watt idle power dissipation. †Power dissipation.

TYPE GE-MOVTM VARISTORS

Power Dissipation: Up to 1.3 watts at 85° C ambient temperature. Idle Power Dissipation: Less than 100 mW. Clamp Ratio: 1.8-2.0 at 10 amps. Current: Can handle up to 2000 amps. Voltage Rating: 95-1000 volts rms and 130-675 VDC. Energy Rating: 7-160 joules. Response Time: Less than 50 nsec.

GE Type	Applied Max. rms Volts	Applied DC Volts	Max. Energy Joules	Max. Avg. Watts*	NET 1-99
V95LA7A	95	130	7	0.45	$1.60
V95LA7B	95	130	7	0.45	1.75
V130LA10A	130	175	10	0.5	1.75
V130LA20A	130	175	20	0.85	2.60
V130LA20B	130	175	20	0.85	2.85

TYPE GE-MOVTM (CONT'D)

GE Type	Applied Max. rms Volts	Applied DC Volts	Max. Energy Joules	Max. Avg. Watts*	Net 1-99
V150LA10A	150	200	10	0.5	1.75
V150LA20A	150	200	20	0.85	2.60
V150LA20B	150	200	20	0.85	2.85
250LA15A	250	330	15	0.6	2.18
V250LA20A	250	330	20	0.6	2.60
V250LA40A	250	330	40	0.9	4.30
V250LA40B	250	330	40	0.9	4.73
V275LA15A	275	369	15	0.6	$2.18
V275LA20A	275	369	20	0.6	2.60
V275LA40A	275	369	40	0.9	4.30
V275LA40B	275	369	40	0.9	4.73
V420LB20A	420	560	20	0.55	3.93
V420LB40A	420	560	40	0.9	5.58
V420LB40B	420	560	40	0.9	6.13
V460LB20A	460	615	20	0.55	3.93
V460LB40A	460	615	40	0.9	5.58
V460LB40B	460	615	40	0.9	6.13
V480LB20A	480	640	20	0.55	3.93
V480LB40A	480	640	40	0.7	5.58
V480LB80A	480	640	80	1.0	7.90
V480LB80B	480	640	80	1.0	8.97
V510LB20A	510	675	20	0.55	4.20
V510LB40A	510	675	40	0.7	5.85
V510LB80A	510	675	80	1.0	9.25
V510LB80B	510	675	80	1.0	10.18
V550LB20A	550		20	0.6	4.20
V550LB40A	550		40	0.7	5.85
V550LB80A	550		80	1.0	9.25
V550LB80B	550		80	1.0	10.18
V575LB20A	575		20	0.65	4.20
V575LB40A	575		40	0.8	5.85
V575LB80A	575		80	1.1	9.25
V575LB80B	575		80	1.1	10.18
V1000LB80A	1000		80	0.9	12.75
V1000LB160A	1000		160	1.3	20.00
V1000LB160B	1000		160	1.3	22.00

*Power dissipation.

MINI-MOVTM VARISTORS

Power Dissipation: Up to .28 watts at 85° C ambient temperature. Idle Power Dissipation: Less than 50 mW. Current: Can handle up to 150 amps. Voltage Rating: 130-300 volts rms and 170-330 VDC. Energy Rating: 1-4 joules. Response Time: Less than 50 nsec. "Aspirin" size for PC board mounting.

Type	Applied Max. Volts	Applied Volts	Max. Joules	Max. Watts*	1-99
V130LA1	130	175	1	0.24	$1.44
V130LA2	130	175	2	0.24	1.53
V150LA1	150	200	1	0.24	1.44
V150LA2	150	200	2	0.24	1.53
V250LA2	250	330	2	0.28	1.53
V250LA4	250	330	4	0.28	1.77
V275LA2	275	375	2	0.28	1.53
V275LA4	275	375	4	0.28	1.77
V300LA2	300	405	2	0.28	1.53
V300LA4	300	405	4	0.28	1.77

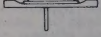
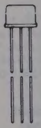
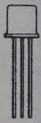
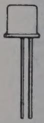
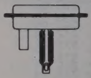
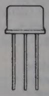
*Power dissipation.

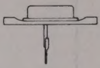
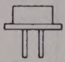
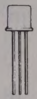
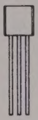
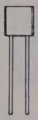
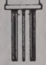
SOLID STATE RELAYS

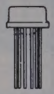
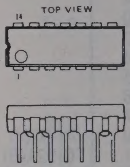
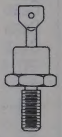
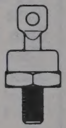
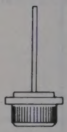
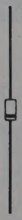
Type GSR10AU5 & GSR10AU10 are normally open solid state relays consisting of an input circuit coupled by an optical isolator into a zero voltage trigger circuit which controls a 5 or 10 amp, 200 volt triac output. Isolation Voltage: 1500 volts rms. Repetitive Peak Offstate Voltage: 200 volts. Zero volt switching with DC input and AC output.

	Input Characteristics		Output Characteristics		
GE Type	Pickup Voltage	Drop Out Voltage	Line Voltage rms	Max. Current amps	NET 1-99
GSR10AU5	4.1 V max.	1.0 V min.	140 V	5	$18.00
GSR10AU10	4.1 V max.	1.0 V min.	140 V	10	20.00

MOTOROLA HEP SEMICONDUCTORS

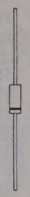
HEP No	Case Style	Description	Suggested Net Price	Case Outline
1	TO-18	Ge RF Transistor—PNP—100MHz 150mW	.89	
2		Replaced by HEP G0002		 TO-3
3	TO-72(C)	Ge RF Transistor—PNP—250MHz 100mW	1.25	
50	TO-18	Si RF Transistor—NPN—250MHz 400mW	.79	
51	TO-5(A)	Si RF Transistor—PNP—150MHz 600mW	1.29	
52	TO-18	Si RF Transistor—PNP—200MHz 400mW	.95	
53	TO-5(A)	Si RF Transistor—NPN—200MHz 600mW	1.15	
54		Replaced by HEP S0015		
55		Replaced by HEP S0015		 TO-5
56		Replaced by HEP S0016		
57		Replaced by HEP S0006		
75	TO-39	Si RF Power Transistor—NPN—250MHz 3W	2.95	
76	TO-39	Si RF Power Transistor—PNP—250MHz 3W	4.95	
101		Replaced by HEP Z0220		
102		Replaced by HEP Z0402		
103		Replaced by HEP Z0408		
104		Replaced by HEP Z0412		
105		Replaced by HEP Z0415		
134	TO-18A	Ge Diode (1N34A Substitute)	.26	
135	TO-18A	Ge Diode (1N60 Substitute)	.26	 TO-18
151		Replaced by HEP R0160		
153		Replaced by HEP R0162		
154		Replaced by HEP R0050		
156		Replaced by HEP R0052		
157		Replaced by HEP R0053		
158		Replaced by HEP R0054		
159		Replaced by HEP R0055		
160		Replaced by HEP R0056		
161		Replaced by HEP R0090		
162		Replaced by HEP R0092		
165		Replaced by HEP R9001		 TO-18A (2 Lead)
166		Replaced by HEP R9002		
170	DO-41	Si Rectifier—Axial Lead—100PIV 2.5Amp	.82	
175	Case 108	Full Wave Bridge Rectifier—50PIV 1Amp	1.49	
176	Case 108	Full Wave Bridge Rectifier—200PIV 1Amp	2.05	
177	Case 108	Full Wave Bridge Rectifier—400PIV 1Amp	2.25	
178	Case 108	Full Wave Bridge Rectifier—600PIV 1Amp	3.05	
200	TO-3	Ge Power Transistor—PNP—TO-3—3A 90W	.82	
230	TO-3	Ge Power Transistor—PNP—TO-3—5A 90W	1.25	
231	TO-36	Ge Power Transistor—PNP—TO-36—15A 150W	1.99	
232	TO-3	Ge Power Transistor—PNP—TO-3—7A 90W	2.34	
233	TO-36	Ge Power Transistor—PNP—TO-36—15A 170W	4.20	
234	TO-3	Ge High Voltage Pwr Transistor—PNP—200V 5A 56W	3.25	 TO-36
235	TO-3	Ge High Voltage Pwr Transistor—PNP—320V 10A 56W	4.50	
236	TO-41	Ge High Current Pwr Transistor—PNP—110V 25A 106W	5.70	
237	TO-36	Ge High Current Pwr Transistor—PNP—75V 30A 170W	9.75	
238	TO-5(A)	Ge General Purpose Power Transistor—PNP—60V 3A	4.70	
239	TO-5(A)	Ge General Purpose Power Transistor—PNP—100V 3A	6.50	
240	TO-66	Si Power Transistor—NPN—300V 500mA 10W	2.05	 TO-39
241		Replaced by HEP S5012		
242	TO-5(A)	Si Med Power Transistor—PNP—60V 3A 6W (Comp. to 243)	2.40	
243	TO-5(A)	Si Med Power Transistor—NPN—60V 3A 6W (Comp. to 242)	1.79	

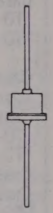
HEP No	Case Style	Description	Suggested Net Price	Case Outline
244	Case 77(A)	Si High Voltage Pwr Transistor—NPN—300V 500mA 25W	2.15	
245		Replaced by HEP S5016		
246		Replaced by HEP S5017		
247	TO-3	Si High Power Transistor—NPN—70V 10A 150W (Comp. to 248)	2.80	
248		Replaced by HEP S7003		TO-41
250		Replaced by HEP G0004		
251		Replaced by HEP G0004		
252		Replaced by HEP G0004		
253		Replaced by HEP G0005		
254		Replaced by HEP G0005		
300		Replaced by HEP R1241		
302		Replaced by HEP R1243		
304		Replaced by HEP R1301		
305		Replaced by HEP R1301R		
306		Replaced by HEP R1304		TO-66
307		Replaced by HEP R1304R		
310	TO-92(J)	Si Unijunction Transistor—300mW	1.49	
311	TO-92A(B)	Si Bilateral Trigger Diode	.99	
312	Case 171(A)	Si Photo Transistor	2.49	
320		Replaced by HEP R1001		
340		Replaced by HEP R1751		
553	Case 71	IC—ECL—Half Adder	4.10	
554	Case 71	IC—ECL—Bias Driver	2.70	
556	Case 71	IC—ECL—3 Input Gate	3.87	
558	Case 71	IC—ECL—J-K Flip-Flop	4.39	
570	TO-116	IC—RTL—Quad 2-Input Gate	2.10	
571	TO-116	IC—RTL—Dual Buffer	2.10	
572	TO-116	IC—RTL—Dual J-K Flip-Flop	3.90	TO-72
573	TO-116	IC—RTL—Hex Inverter	2.30	
580	TO-99	IC—RTL—Dual 2-Input Gate	.95	
581	TO-99	IC—RTL—Dual 4-Input Gate	.95	
582	TO-99	IC—RTL—Dual Buffer	.99	
583	TO-99	IC—RTL—J-K Flip-Flop	1.49	
584	TO-99	IC—RTL—Dual 2-Input Gate (Med. Power)	1.89	
590	Case 71	IC—Linear—High Frequency Amplifier	3.99	
591	Case 71A	IC—Linear—Wide Band Amplifier/Discriminator	3.60	
592	Case 71	IC—Linear—Stereo Preamplifier	3.25	
593	Case 71	IC—Linear—1 Watt Audio Power Amplifier	7.95	
594	TO-116	IC—Linear—FM Stereo Demodulator	5.92	
595	TO-116	IC—Linear—FM Stereo Demodulator	5.92	TO-92
600		Replaced by HEP R0002		
601		Replaced by HEP R0222R		
602		Replaced by HEP Z0405		
603		Replaced by HEP Z0407		
604		Replaced by HEP Z0414		
605		Replaced by HEP Z0416		
606		Replaced by HEP Z0417		
607		Replaced by HEP Z0418		
608		Replaced by HEP Z0424		
609		Replaced by HEP Z0426		
610		Replaced by HEP Z0432		
611		Replaced by HEP Z0433		
612		Replaced by HEP Z0436		
613		Replaced by HEP Z0439		TO-92A (2 Lead)
620	Case 85	Thyristor (SCR)—400V 8Amp	4.40	
621	Case 87L	Thyristor (SCR)—400V 8Amp	5.25	
622		Replaced by HEP R1222		
623		Replaced by HEP G6013		
624		Replaced by HEP G6013		
625	TO-3	Ge General Purpose Audio Power Amplifier—PNP	7.10	
626		Replaced by HEP G6001		
627	TO-3	Ge General Purpose Audio Power Amplifier—PNP	5.20	
628		Replaced by HEP G6013		
629		Replaced by HEP G0006		
630		Replaced by HEP G0006		
631		Replaced by HEP G0006		TO-99
632		Replaced by HEP G0006		

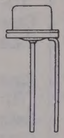
HEP No	Case Style	Description	Suggested Net Price	Case Outline
633		Replaced by HEP G0007		
634		Replaced by HEP G0007		
635		Replaced by HEP G0008		
636		Replaced by HEP G0008		
637		Replaced by HEP G0002		
638	TO-5(A)	Ge General Purpose Drift-Field—PNP	2.33	
639		Replaced by HEP G0010		
640		Replaced by HEP G0010		
641	TO-18	Ge General Purpose RF and Audio Amplifier—NPN	1.32	TO-100
642		Replaced by HEP G6016		
643		Replaced by HEP G6016		
644	TO-3	Ge High Voltage Pwr Transistor—PNP— 160V 10A 85W	8.50	 TOP VIEW 14 1
700		Replaced by HEP S5017		
701		Replaced by HEP S5016		
702	TO-66	Si General Purpose Audio Power Amplifier—PNP	5.25	
703	TO-66	Si General Purpose Audio Power Amplifier—NPN	2.75	
704	TO-3	Si General Purpose Audio Power Amplifier—NPN	2.67	
705		Replaced by HEP S7003		
706	TO-39	Si General Purpose Audio Power Amplifier—NPN	3.10	
707	TO-3	Si High Voltage High Power—NPN— (400 Volts 10 Amp)	8.80	TO-116
708	TO-18	Si Low POWER RF Amplifier—PNP	1.20	
709	TO-72(C)	Si UHF Oscillator, Mixer, RF Amplifier—NPN	2.07	
710	TO-5(A)	Si Low Frequency RF and Audio Amplifier—PNP	1.20	
712	TO-5(A)	Si Low Frequency Oscillator, Mixer, RF Amplifier—NPN	3.30	
713	TO-5(A)	Si Low Frequency Oscillator, Mixer, RF Amplifier—NPN	2.45	
714	Case 152	Si High Voltage Audio Amplifier—NPN	3.10	
715	TO-92(A)	Si General Purpose Low Freqneucy RF and Audio Amp—PNP	.95	
716	TO-92(A)	Si General Purpose Medium Current Amplifier and Switch—PNP	1.24	DO-4
717		Replaced by HEP S0006		
718		Replaced by HEP S0020		
719		Replaced by HEP S0020		
720		Replaced by HEP S0020		
721		Replaced by HEP S0015		
722		Replaced by HEP S0021		
723		Replaced by HEP S0021		
724		Replaced by HEP S0022		
725		Replaced by HEP S0023		DO-5
726		Replaced by HEP S0023		
727		Replaced by HEP S0021		
728		Replaced by HEP S0022		
729		Replaced by HEP S0022		
730		Replaced by HEP S0024		
731		Replaced by HEP S0022		
732		Replaced by HEP S0021		
733		Replaced by HEP S0020		
734		Replaced by HEP S0016		
735		Replaced by HEP S0025		
736		Replaced by HEP S0025		
737		Replaced by HEP S0024		DO-21
738		Replaced by HEP S0025		
739	TO-92(A)	Si 2N404 (Germanium) Replacement—PNP	.65	
740	TO-3	Si High Voltage High Power—NPN— (700 Volts 3.5 Amp)	8.80	
801	TO-71(A)	Field Effect Transistor—Audio—N Channel	1.59	
802	TO-92(E)	Field Effect Transistor—RF—N Channel	1.59	
803	TO-72(D)	Field Effect Transistor—Audio/RF—P Channel	3.39	
C0900P	TO-116	IC—HTL—Dual 4-Input Line Driver	2.39	
C0901P	TO-116	IC—HTL—Dual J-K Flip-Flop	3.25	
C0902P	TO-116	IC—HTL—Dual 2-Input NAND Gate	1.89	
C0903P	TO-116	IC—HTL—Dual 4-Input Expander	2.05	
C0904P	TO-116	IC—HTL—Triple 3-Input NAND Gate	2.05	
C0905P	TO-116	IC—HTL—Dual 4-Input NAND Gate	2.05	
C0906P	TO-116	IC—HTL—Master-Slave R-S Flip-Flop	3.45	DO-41

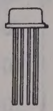
HEP No	Case Style	Description	Suggested Net Price
C0907P	TO-116	IC—HTL—Quad Latch	3.45
C0908P	TO-116	IC—HTL—Hex Inverter	1.80
C0909P	TO-116	IC—HTL—Quad 2-Input NAND Gate	1.80
C0910P	TO-116	IC—HTL—Triple Level Translator	2.27
C0911P	TO-116	IC—HTL—Dual Monostable Multivibrator	3.62
C0912P	TO-116	IC—HTL—Dual 2-Wide 2-Input AND-OR-INVERT Gate	2.05
C1030P	TO-116	IC—DTL—Dual 4-Input NAND Gate	.98
C1032P	TO-116	IC—DTL—Dual 4-Input Buffer	.98
C1033P	TO-116	IC—DTL—Dual 4-Input Expander	.98
C1035P	TO-116	IC—DTL—Hex Inverter (No Pullup Resistors)	1.10
C1038P	TO-116	IC—DTL—Decade Counter	3.95
C1039P	TO-116	IC—DTL—Divide-By-Sixteen Counter	3.95
C1044P	TO-116	IC—DTL—Dual 4-Input NAND Power Gate	.98
C1045P	TO-116	IC—DTL—Clocked Flip-Flop	1.25
C1052P	TO-116	IC—DTL—Dual J-K Flip-Flop	1.80
C1058P	TO-116	IC—DTL—Quad 2-Input NAND Power Gate	1.10
C1062P	TO-116	IC—DTL—Triple 3-Input NAND Gate	.98
C2001P	TO-116	IC—RTL—Quad 2-Input Expander	1.80
C2002P	TO-116	IC—RTL—Dual Buffer	1.80
C2500P	TO-116	IC—RTL—Dual 4-Input Expander	1.49
C2501P	Case 612	IC—RTL—BCD-to-Decimal Decoder	2.75
C2502P	TO-116	IC—RTL—Quad 2-Input NOR Gate	1.57
C2503P	TO-116	IC—RTL—Multifunction Device (1 J-K Flip-Flop, 1 Inverter, 2 Buffers)	1.49
C3000P	TO-116	IC—TTL—Quad 2-Input NAND Gate	.98
C3001P	TO-116	IC—TTL—Quad 2-Input NAND Gate (Direct Output)	.98
C3004P	TO-116	IC—TTL—Hex Inverter	1.18
C3010P	TO-116	IC—TTL—Triple 3-Input NAND Gate	.98
C3020P	TO-116	IC—TTL—Dual 4-Input NAND Gate	.98
C3030P	TO-116	IC—TTL—8-Input NAND Gate	.98
C3040P	TO-116	IC—TTL—Dual 4-Input NAND Buffer	.98
C3041P	Case 612	IC—TTL—BCD-to-Decimal Decoder and High-Level Driver	3.12
C3050P	TO-116	IC—TTL—Dual 2-Wide 2-Input AND-OR-INVERT Gate	.98
C3073P	TO-116	IC—TTL—Dual J-K Flip-Flop	1.96
C3075P	Case 612	IC—TTL—Quad Latch	3.40
C3400P	TO-116	IC—ECL—85-MHz J-K Flip-Flop	4.45
C3401P	TO-116	IC—ECL—120-MHz J-K Flip-Flop	6.60
C3800P	TO-116	IC—TTL—Decade Counter	3.80
C3801P	TO-116	IC—TTL—Divide-By-Twelve Counter	3.80
C3802P	Case 612	IC—TTL—Seven-Segment Character Generator	3.37
C3803P	TO-116	IC—TTL—Retriggerable Monostable Multivibrator	2.45
C3805P	TO-116	IC—TTL—Dual Voltage-Controlled Multivibrator	4.63
C3806P	TO-116	IC—TTL—Phase-Frequency Detector	4.63
C6001	Case 643A	IC—Linear—FM IF Amplifier (Replacement for uA703 or CA3053)	2.09
C6002	Case 644A	IC—Linear—Low-Noise Audio Preamplifier	2.50
C6003	Case 206A	IC—Linear—¼-Watt Audio Amplifier	1.55
C6004	Case 644A	IC—Linear—1-Watt Audio Amplifier and Preamp	2.90
C6007	Case 206A	IC—Linear—Single Toggle Flip-Flop	1.42
C6008	Case 643A	IC—Linear—1-Watt Audio Amplifier and Preamp	2.50
C6009	Case 643A	IC—Linear—Electronic Remote-Control Attenuator	2.50
C6010	Case 206A	IC—Linear—Wide-Band Amplifier	1.53
C6011	Case 643A	IC—Digital—Dual-Toggle Flip-Flop	2.32
C6012	Case 643A	IC—Linear—Voltage Regulator	2.69
C6013	Case 206A	IC—Linear—Class A Audio Driver	1.52
C6014	Case 206A	IC—Linear—Voltage Regulator	2.69
C6015	Case 643A	IC—Digital—Dual-Toggle Flip-Flop with Reset	2.60
C6016	Case 644A	IC—Linear—Class B Audio Driver	2.40
C6017	Case 644A	IC—Linear—Differential/Cascode Amplifier	1.72
C6018	Case 206A	IC—Linear—Audio Driver	1.43
C6049G	Case 602A	IC—Linear—Voltage Regulator (Positive)	3.00
C6049R	Case 614	IC—Linear—Voltage Regulator (Positive)	3.75
C6050G	Case 602A	IC—Linear—Balanced Modulator/Demodulator	3.35
C6051L	TO-116	IC—Linear—Dual Operational Amplifier	2.75
C6052P	Case 626	IC—Linear—Operational Amplifier	2.10

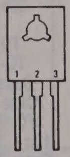
Case Outline


Case 17

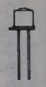
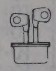
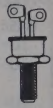
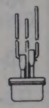
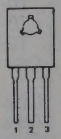
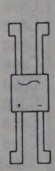

Case 60

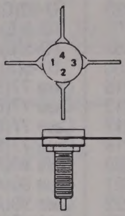
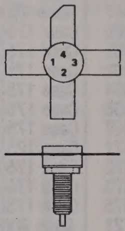
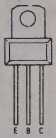
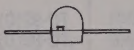
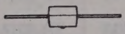

Case 70

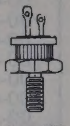
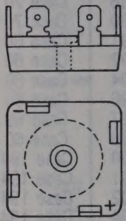
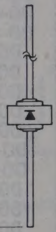
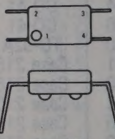
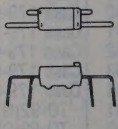

Case 71 Case 71A

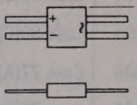
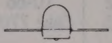
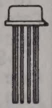
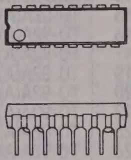
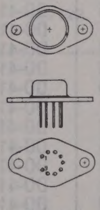


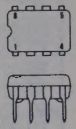
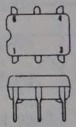
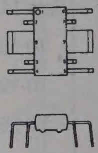
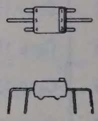
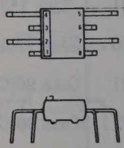
Case 77

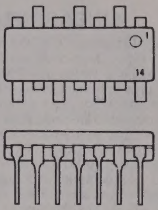
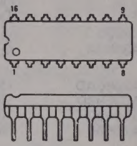
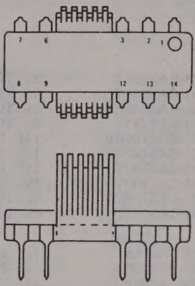
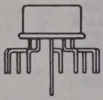
HEP No	Case Style	Description	Suggested Net Price	Case Outline
C6053G	TO-99	IC—Linear—Operational Amplifier	2.20	
C6053L	TO-116	IC—Linear—Operational Amplifier	2.85	
C6054G	Case 602A	IC—Linear—Voltage Regulator (Negative)	4.15	
C6054R	Case 614	IC—Linear—Voltage Regulator (Negative)	4.49	
C6055L	TO-116	IC—Linear—Stereo Preamplifier	3.85	
C6056P	TO-116	IC—Linear—FM Multiplex Stereo Demodulator	3.00	
C6057P	TO-116	IC—Linear—Dual Balanced Chroma Demodulator	4.54	 Case 82
C6059P	Case 626	IC—Linear—IF and AGC Amplifier	2.24	
C6060P	TO-116	IC—Linear—TV FM Limiting Amplifier, Detector, Preamp, and Driver	3.47	
C6061P	TO-116	IC—Linear—High-Gain FM/IF Amplifier	3.17	
C6062P	TO-116	IC—Linear—FM/IF Amplifier with Quadrature Detector	4.54	
C6063P	TO-116	IC—Linear—FM/IF Amplifier, Limiter, Detector, Driver, Electronic Attenuator	3.59	
C6064P	Case 627	IC—Linear—Class A Audio Driver	2.44	 Case 85
C6065P	Case 647	IC—Linear—FM Multiplex Stereo Demodulator	8.25	
C6066P	TO-116	IC—Linear—Chroma Demodulator	7.15	
C6067G	TO-100	IC—Linear—Dual Doubly Balanced Chroma Demodulator	2.94	
C6068P	Case 647	IC—Linear—FM Multiplex Stereo Demodulator	2.79	
C6069G	Case 686	IC—Linear—AFT/Amplifier/Detector/Driver	2.47	
C6070P	Case 648	IC—Linear—Subcarrier Regenerator	3.17	
C6071P	TO-116	IC—Linear—Chroma Amplifier	3.17	
C6072P	TO-116	IC—Linear—Balanced Chroma Demodulator	3.12	
C6073P	Case 656	IC—Linear—2-Watt Audio Amplifier	4.20	
C6074P	Case 647	IC—Linear—FM Multiplex Stereo Demodulator	4.10	
C6075P	TO-116	IC—Linear—TV Color Processing Circuit	4.55	 Case 86
C6076P	TO-116	IC—Linear—Video IF Amplifier and AGC	2.94	
C6077P	TO-116	IC—Linear—TV Color Processing Circuit	4.55	
C6078R	Case 614	IC—Linear—Power Booster	6.67	
C6079P	Case 626	IC—Linear—Video Detector	2.60	
C6080P	TO-116	IC—Linear—Low-Noise Stereo Preamplifier	2.65	
C6081P	TO-116	IC—Linear—TV Color Processing Circuit	3.37	
C6082P	Case 647	IC—Linear—IF Amplifier and Quadrature Detector	2.65	
C6083P	Case 647	IC—Linear—IF Amp/Limiter/FM Detector/Driver/Attenuator	2.60	
C6085P	Case 612	IC—Linear—TV Color Signal Processor	3.94	
C6087P	TO-116	IC—Linear—Low-Noise Stereo Preamplifier	3.12	
C6089	Case 1A1	IC—Linear—Chroma Demodulator	6.65	 Case 87L
C6090	Case 1A2	IC—Linear—Dual Audio Amplifier—2 Watts	6.54	
F0021	TO-92(E)	Field Effect Transistor—VHF/UHF—N-Channel	1.89	
F1035	TO-92(F)	Field Effect Transistor—RF—P-Channel	1.29	
F2004	TO-72(B)	MOS FET—Dual Gate—VHF—N-Channel	2.50	
F2005	TO-72(A)	MOS FET—VHF/UHF—N-Channel	2.90	
F2007	Case 206	MOS FET—Dual Gate—N-Channel	1.65	
G0002	TO-1	Ge RF Transistor—PNP—600 MHz 60mW	2.92	
G0004	TO-5(A)	Ge General Purpose Transistor—PNP—Med. Gain 200mW	1.16	
G0005	TO-5(A)	Ge General Purpose Transistor—PNP—Med. Gain 225mW	1.49	
G0006	TO-5(A)	Ge General Purpose Audio Amplifier—PNP	3.14	
G0007	TO-5(A)	Ge General Purpose Audio Amplifier—PNP	3.14	 Case 90
G0008	TO-18	Ge General Purpose RF Amplifier—PNP	2.00	
G0010	TO-18	Ge General Purpose Drift Field—PNP	2.00	
G6001	TO-3	Ge High Current Pwr Transistor—PNP—90V 25A 85W	7.00	
G6002	TO-36	Ge High Current Pwr Transistor—PNP 40V 65A 170W	7.55	
G6013	TO-3	Ge General Purpose Audio Power Amplifier—PNP	2.67	
G6016	TO-66	Ge General Purpose Audio Power Amplifier—PNP	2.09	
P0001	Case 82	Si Phototransistor—NPN	4.45	
P0002	Case 173	Pi Phototransistor	2.08	
P1001	TO-92(L)	Si Darlington Amplifier Phototransistor—NPN	.98	
P2000	Case 171(B)	Light-Emitting Diode	1.77	
P2001	Case 234-02	Light-Emitting Diode	1.49	
P2002	Case 171(B)	InFrared-Emitting Diode	2.25	
P2003	Case 171(B)	Light-Emitting Diode	.79	 Case 108
P2004	Case 234-04	Light-Emitting Diode (Diffused Lens)	.69	

HEP No	Case Style	Description	Suggested Net Price	Case Outline
R0050	DO-41	Silicon Rectifier, Axial Lead, 50PIV 1 Amp	.36	
R0051	DO-41	Silicon Rectifier, Axial Lead, 100PIV 1 Amp	.40	
R0052	DO-41	Silicon Rectifier, Axial Lead, 200PIV 1 Amp	.42	
R0053	DO-41	Silicon Rectifier, Axial Lead, 400PIV 1 Amp	.54	
R0054	DO-41	Silicon Rectifier, Axial Lead, 600PIV 1 Amp	.63	
R0055	DO-41	Silicon Rectifier, Axial Lead, 800PIV 1 Amp	.72	
R0056	DO-41	Silicon Rectifier, Axial Lead, 1000PIV 1 Amp	.85	
R0080	Case 70	Si Press-Fit Rectifier—50PIV 3A	.80	
R0081	Case 70	Si Press-Fit Rectifier—100PIV 3A	.88	
R0082	Case 70	Si Press-Fit Rectifier—200PIV 3A	1.02	
R0084	Case 70	Si Press-Fit Rectifier—400PIV 3A	1.34	
R0086	Case 70	Si Press-Fit Rectifier—600PIV 3A	1.71	
R0090	Case 70	Si "Top Hat" Rectifier—50PIV 3A	.80	
R0091	Case 60	Si "Top Hat" Rectifier—100PIV 3A	.88	**Case 144B**
R0092	Case 60	Si "Top Hat" Rectifier—200PIV 3A	1.02	
R0094	Case 60	Si "Top Hat" Rectifier—400PIV 3A	1.34	
R0096	Case 60	Si "Top Hat" Rectifier—600PIV 3A	1.71	
R0097	Case 60	Si "Top Hat" Rectifier—800PIV 3A	2.39	
R0098	Case 60	Si "Top Hat" Rectifier—1000PIV 3A	3.62	
R0100	Case 194	Si "Axial Lead" Rectifier—50PIV 6A	.99	
R0101	Case 194	Si "Axial Lead" Rectifier—100PIV 6A	1.12	
R0102	Case 194	Si "Axial Lead" Rectifier—200PIV 6A	1.25	
R0104	Case 194	Si "Axial Lead" Rectifier—400PIV 6A	1.50	
R0106	Case 194	Si "Axial Lead" Rectifier—600PIV 6A	2.39	
R0130	DO-4(A)	Si Stud Mount Rectifier—50PIV 12A	1.23	
R0131	DO-4(A)	Si Stud Mount Rectifier—100PIV 12A	1.39	
R0132	DO-4(A)	Si Stud Mount Rectifier—200PIV 12A	1.57	
R0134	DO-4(A)	Si Stud Mount Rectifier—400PIV 12A	1.99	
R0136	DO-4(A)	Si Stud Mount Rectifier—600PIV 12A	3.05	
R0137	DO-4(A)	Si Stud Mount Rectifier—800PIV 12A	6.75	
R0138	DO-4(A)	Si Stud Mount Rectifier—1000PIV 12A	9.40	
R0160	DO-5	Si Stud Mount Rectifier—50PIV 15A	1.53	**Case 145A**
R0161	DO-5	Si Stud Mount Rectifier—100PIV 15A	1.68	
R0162	DO-5	Si Stud Mount Rectifier—200PIV 15A	2.20	
R0164	DO-5	Si Stud Mount Rectifier—400PIV 15A	3.05	
R0166	DO-5	Si Stud Mount Rectifier—600PIV 15A	4.60	
R0220	DO-21	Si Press-Fit Rectifier—50PIV 25A	.76	
R0222	DO-21	Si Press-Fit Rectifier—200PIV 25A	1.20	
R0250	DO-5	Si Stud Mount Rectifier—50PIV 35A	2.11	
R0251	DO-5	Si Stud Mount Rectifier—100PIV 35A	2.47	
R0253	DO-5	Si Stud Mount Rectifier—200PIV 35A	3.75	
R0254	DO-5	Si Stud Mount Rectifier—300PIV 35A	5.45	
R0255	DO-5	Si Stud Mount Rectifier—400PIV 35A	6.20	
R0256	DO-5	Si Stud Mount Rectifier—500PIV 35A	6.70	
R0257	DO-5	Si Stud Mount Rectifier—600PIV 35A	7.50	
R0600	DO-41	Si Fast Recovery Rectifier, 50PIV 1 Amp	.60	**Case 152**
R0602	DO-41	Si Fast Recovery Rectifier, 200PIV 1 Amp	1.47	
R0604	DO-41	Si Fast Recovery Rectifier, 400PIV 1 Amp	2.05	
R0606	DO-41	Si Fast Recovery Rectifier, 600PIV 1 Amp	2.12	
R0700	TO-92A	Si UHF Diode (Hot-Carrier)	1.09	
R0841	Case 216	Full-Wave Bridge Rectifier, 50 Volt 1.8 Amp	2.42	
R0842	Case 216	Full-Wave Bridge Rectifier, 100 Volt 1.8 Amp	2.52	
R0843	Case 216	Full-Wave Bridge Rectifier, 200 Volt 1.8 Amp	2.75	
R0845	Case 216	Full-Wave Bridge Rectifier, 400 Volt 1.8 Amp	3.35	
R0846	Case 216	Full-Wave Bridge Rectifier, 600 Volt 1.8 Amp	3.92	
R0875	Case 179-01	Full-Wave Bridge Rectifier, 50 Volt 12 Amp	5.00	
R0876	Case 179-01	Full-Wave Bridge Rectifier, 100 Volt 12 Amp	5.47	
R0877	Case 179-01	Full-Wave Bridge Rectifier, 200 Volt 12 Amp	6.85	**Case 171**
R0878	Case 179-01	Full-Wave Bridge Rectifier, 400 Volt 12 Amp	8.02	
R0879	Case 179-01	Full-Wave Bridge Rectifier, 600 Volt 12 Amp	10.60	
R0880	Case 179-02	Full-Wave Bridge Rectifier, 50 Volt 27 Amp	5.94	
R0881	Case 179-02	Full-Wave Bridge Rectifier, 100 Volt 27 Amp	6.39	
R0882	Case 179-02	Full-Wave Bridge Rectifier, 200 Volt 27 Amp	8.02	
R0883	Case 179-02	Full-Wave Bridge Rectifier, 400 Volt 27 Amp	9.06	
R0884	Case 179-02	Full-Wave Bridge Rectifier, 600 Volt 27 Amp	11.77	
R1001	TO-92(G)	Thyristor (SCR)—30V 800mA	.86	
R1002	TO-92(G)	Thyristor (SCR)—60V 800mA	.97	
R1003	TO-92(G)	Thyristor (SCR)—100V 800mA	1.19	**Case 173**
R1004	TO-92(G)	Thyristor (SCR)—150V 800mA	1.19	

HEP No	Case Style	Description	Suggested Net Price	Case Outline
R1005	TO-92(G)	Thyristor (SCR)—200V 800mA	1.19	
R1101	TO-5(B)	Thyristor (SCR)—50Volt 1.6 Amp	1.77	 Case 175
R1102	TO-5(B)	Thyristor (SCR)—100Volt 1.6 Amp	2.00	
R1103	TO-5(B)	Thyristor (SCR)—200Volt 1.6 Amp	2.57	
R1215	Case 77(B)	Sensitive-Gate Thyristor (SCR)—30Volt 4 Amp	1.25	
R1216	Case 77(B)	Sensitive-Gate Thyristor (SCR)—60Volt 4 Amp	1.34	
R1217	Case 77(B)	Sensitive-Gate Thyristor (SCR)—100Volt 4 Amp	1.45	
R1218	Case 77(B)	Sensitive-Gate Thyristor (SCR)—200Volt 4 Amp	1.55	
R1220	Case 90(A)	Thyristor (SCR)—50V 8A	1.37	
R1221	Case 90(A)	Thyristor (SCR)—200V 8A	1.72	
R1222	Case 90(A)	Thyristor (SCR)—400V 8A	2.31	
R1223	Case 90(A)	Thyristor (SCR)—600V 8A	5.10	
R1241	Case 86(A)	Thyristor (SCR)—50V 8A	2.25	 Case 179
R1242	Case 86(A)	Thyristor (SCR)—100V 8A	2.57	
R1243	Case 86(A)	Thyristor (SCR)—200V 8A	2.82	
R1244	Case 86(A)	Thyristor (SCR)—300V 8A	3.26	
R1245	Case 86(A)	Thyristor (SCR)—400V 8A	3.74	
R1246	Case 86(A)	Thyristor (SCR)—500V 8A	6.95	
R1247	Case 86(A)	Thyristor (SCR)—600V 8A	9.25	
R1300	Case 175(A)	Thyristor (SCR)—25V 16A	4.20	
R1301	Case 175(A)	Thyristor (SCR)—50V 16A	4.75	
R1302	Case 175(A)	Thyristor (SCR)—100V 16A	5.95	
R1304	Case 175(A)	Thyristor (SCR)—200V 16A	7.20	
R1306	Case 175(A)	Thyristor (SCR)—300V 16A	9.25	
R1307	Case 175(A)	Thyristor (SCR)—400V 16A	10.80	
R1471	Case 175(A)	Thyristor (SCR)—50V 35A	5.40	
R1472	Case 175(A)	Thyristor (SCR)—100V 35A	6.25	
R1473	Case 175(A)	Thyristor (SCR)—200V 35A	7.45	
R1475	Case 175(A)	Thyristor (SCR)—400V 35A	10.80	
R1721	Case 90(B)	Triac—50V 8A	1.25	 Case 194
R1722	Case 90(B)	Triac—100V 8A	1.56	
R1723	Case 90(B)	Triac—200V 8A	1.90	
R1725	Case 90(B)	Triac—400V 8A	2.79	
R1750	Case 86(B)	Triac—50V 10A	2.50	
R1751	Case 86(B)	Triac—200V 10A	3.71	
R1752	Case 86(B)	Triac—400V 10A	4.95	
R1781	Case 175(B)	Triac—50V 25A	4.02	
R1782	Case 175(B)	Triac—100V 25A	5.62	
R1783	Case 175(B)	Triac—200V 25A	7.55	
R1785	Case 175(B)	Triac—400V 25A	13.20	
R2001	TO-92(H)	Si Bidirectional Switch—8V 2A	1.29	
R2021	TO-92(K)	Si Unidirectional Switch—8V 2A	1.19	
R2500	TO-92A(A)	Si Voltage-Variable Capacitance Diode—6.1 to 7.5 pf	1.10	
R2501	TO-92A(A)	Si Voltage-Variable Capacitance Diode—9.0 to 11.0 pf	1.10	
R2502	TO-92A(A)	Si Voltage-Variable Capacitance Diode—13.5 to 16.5 pf	1.10	
R2503	TO-92A(A)	Si Voltage-Variable Capacitance Diode—29.7 to 36.3 pf	1.10	 Case 206
R2504	TO-92A(A)	Si Voltage-Variable Capacitance Diode—50.4 to 61.6 pf	1.10	
R2505	TO-92A(A)	Si Voltage-Variable Capacitance Diode—90.0 to 110.0 pf	1.10	
R9001	TO-92(C)	Si Dual Diode—Common Cathode	.47	
R9002	TO-92(D)	Si Dual Diode—Common Anone	.47	
R9003	TO-92(M)	Si Dual Diode—Series Connected	.47	
S0001	TO-92(A)	Si General Purpose High Voltage Transistor—NPN—140V 600mA	1.05	
S0002	TO-92(A)	Si General Purpose Oscillator, Mixer, Amplifier—NPN	.57	
S0003	TO-92(A)	Si General Purpose Oscillator, Mixer, Amplifier—NPN	.70	 Case 206A
S0004	TO-92(A)	Si High Frequency RF Amplifier, Mixer, Oscillator—NPN	.94	
S0005	TO-92(A)	Si General Purpose High Voltage Amplifier—NPN	.95	
S0006	TO-92(A)	Si General Purpose Oscillator, Mixer Amplifier—PNP	.40	

HEP No	Case Style	Description	Suggested Net Price	Case Outline
S0007	TO-92(A)	Si General Purpose Medium Voltage Amplifier—NPN	.59	 Case 216
S0008	TO-92(B)	Si General Purpose IF Amplifier—NPN	1.25	
S0009	TO-92(B)	Si General Purpose IF Amplifier—NPN	1.25	
S0010	TO-92(B)	Si General Purpose IF Amplifier—NPN	1.25	
S0015	TO-92(A)	Si General Purpose RF Amplifier—NPN	1.05	
S0016	TO-92(B)	Si UHF Oscillator—NPN—750MHz	1.40	
S0020	TO-92(A)	Si VHF/UHF Oscillator, Mixer,RF Amplifier—NPN—800MHz	1.38	
S0021	TO-92(A)	Si General Purpose Amplifier—NPN	1.05	
S0022	TO-92(A)	Si General Purpose Amplifier—NPN	1.14	
S0023	TO-92(A)	Si General Purpose Amplifier—NPN	1.07	
S0024	TO-92(A)	Si General Purpose High-Gain Amplifier—NPN	1.10	
S0025	TO-92(A)	Si General Purpose Amplifier—NPN	1.12	
S3001	TO-39	Si RF Power Transistor—NPN—65V 1A 5W P out @ 500MHz	3.75	 Case 234-02
S3002	TO-39	Si Medium Power Transistor—NPN—80V 5A 6W 30MHz	8.20	
S3003	TO-39	Si Medium Power Transistor—PNP—80V 5A 6W 30MHz	23.30	
S3005	Case 144B	Si RF Power Transistor—NPN—36V 1A 2W P out @ 175MHz	9.55	
S3006	Case 144B	Si RF Power Transistor—NPN—36V 3A 10W P out @ 175MHz	19.90	
S3007	Case 145A	Si RF Power Transistor—NPN—36V 5A 25W P out @ 175MHz	24.95	 Case 602A
S3008	TO-39	Si RF Power Transistor—NPN—55V 400mA 1.5 P out @ 400MHz	2.18	
S3009	Case 145A	Si RF Power Transistor—NPN—36V 6A 40W P out @ 175MHz	39.95	
S3010	TO-39	Si Medium Power Transistor—NPN—70V 4A 10W—30MHz	4.90	
S3011	TO-39	Si Medium Power Transistor—NPN—70V 1A 7W—100MHz	2.32	
S3012	TO-39	Si Medium Power Transistor—PNP—70V 1A 7W—100MHz	2.59	
S3020	Case 152	Si Medium Power Transistor—NPN—60V 1A 5W—150MHz	1.43	
S3021	Case 152	Si Medium Power Transistor—NPN—250V 1A 5W—100MHz h_{FE} 120 typ	1.85	 Case 612
S3022	Case 152	Si Medium Power Transistor—NPN—250V 1A 5W—100MHz h_{FE} 225 typ	1.85	
S3023	Case 152	Si General Purpose Amplifier—NPN—35V 1.5A 8W—50MHz h_{FE} 110 typ	1.40	
S3024	Case 152	Si General Purpose Amplifier—NPN—35V 1.5A 8W—50MHz h_{FE} 200 typ	1.40	
S3025	Case 152	Si General Purpose Amplifier—NPN—35V 1.5A 8W—50MHz h_{FE} 320 typ	1.40	
S3026	Case 152	Si General Purpose Amplifier—NPN—35V 1.5A 8W—50MHz h_{FE} 550 typ	1.40	
S3027	Case 152	Si General Purpose Amplifier—PNP—35V 1.5A 8W—50MHz h_{FE} 110 typ	1.55	
S3028	Case 152	Si General Purpose Amplifier—PNP—35V 1.5A 8W—50MHz h_{FE} 200 typ	1.55	
S3029	Case 152	Si General Purpose Amplifier—PNP—35V 1.5A 8W—50MHz h_{FE} 320 typ	1.55	 Case 614
S3030	Case 152	Si General Purpose Amplifier—PNP—35V 1.5A 8W—50MHz h_{FE} 550 typ	1.55	
S3031	Case 152	Si General Purpose Amplifier—PNP—80V 1A 5W—125MHz	1.75	
S5000	Case 77(A)	Si General Purpose Power Amplifier—NPN—80V 4A 40W	3.20	
S5001	Case 90(C)	Si General Purpose Power Amplifier—NPN—70V 10A 90W	2.39	
S5002	Case 90(C)	Si General Purpose Power Amplifier—PNP—70V 10A 90W	3.79	
S5003	Case 77(A)	Si General Purpose Power Amplifier—NPN—60V 4A 40W	2.65	

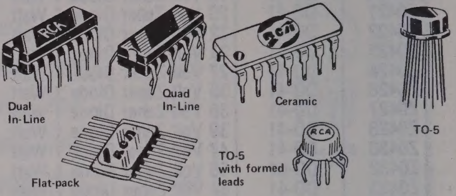
HEP No	Case Style	Description	Suggested Net Price	Case Outline
S5004	Case 90(C)	Si General Purpose Power Amplifier—NPN—90V 7A 90W	2.42	 Case 626
S5005	Case 90(C)	Si General Purpose Power Amplifier—PNP—90V 7A 90W	3.85	
S5006	Case 77(A)	Si General Purpose Power Amplifier—PNP—80V 4A 40W	3.85	
S5007	Case 77(A)	Si General Purpose Power Amplifier—PNP—60V 4A 40W	3.05	
S5008	Case 90(C)	Si General Purpose Power Amplifier—PNP—40V 5A 65W hFE 70 typ	3.05	
S5009	Case 90(C)	Si General Purpose Power Amplifier—PNP—40V 5A 65W hFE 120 typ	3.85	
S5010	Case 90(C)	Si General Purpose Power Amplifier—PNP—40V 5A 65W hFE 200 typ	4.30	
S5012	TO-66	Si High-Power Transistor—NPN—160V 5A 40W	6.00	
S5016	Case 77(A)	Si Med-Power Transistor—NPN—60V 3A 30W (Comp. to S5017)	2.22	 Case 627
S5017	Case 77(A)	Si Med-Power Transistor—PNP—60V 3A 30W (Comp. to S5016)	2.22	
S7000	TO-3	Si High-Power Transistor—NPN—100V 30A 200W	6.98	
S7001	TO-3	Si High-Power Transistor—PNP—100V 30A 200W	7.69	
S7003	TO-3	Si High-Power Transistor—PNP—70V 10A 150W (Comp. to 247)	8.26	
S9001	TO-92(G)	Programmable Unijunction Transistor	1.45	
S9100	TO-92(A)	Si Darlington Amplifier—NPN	.79	
S9101	Case 77(A)	Si Darlington Amplifier—NPN—60V 4A 40W	2.49	
S9102	Case 90(C)	Si Darlington Amplifier—NPN—60V 5A 70W	2.87	
S9120	TO-92(A)	Si Darlington Amplifier—PNP	.89	
S9121	Case 77(A)	Si Darlington Amplifier—PNP—60V 4A 40W	2.79	 Case 641
S9122	Case 90(C)	Si Darlington Amplifier—PNP—60V 4A 70W	3.12	
S9140	TO-3	Si Darlington Amplifier—NPN—60V 5A 90W	3.09	
S9141	TO-3	Si Darlington Amplifier—PNP—60V 5A 90W	4.78	
Z0206	TO-92A(A)	3.3 Volt Zener Diode 500mW	.83	
Z0208	TO-92A(A)	3.9 Volt Zener Diode 500mW	.83	
Z0210	TO-92A(A)	4.7 Volt Zener Diode 500mW	.83	
Z0211	TO-92A(A)	5.1 Volt Zener Diode 500mW	.83	
Z0212	TO-92A(A)	5.6 Volt Zener Diode 500mW	.83	
Z0214	TO/&¼A(A)	6.2 Volt Zener Diode 500mW	.83	
Z0215	TO-92A(A)	6.8 Volt Zener Diode 500mW	.83	
Z0216	TO-92A(A)	7.5 Volt Zener Diode 500mW	.83	
Z0217	TO-92A(A)	8.2 Volt Zener Diode 500mW	.83	
Z0219	TO-92A(A)	9.1 Volt Zener Diode 500mW	.83	
Z0220	TO-92A(A)	10 Volt Zener Diode 500mW	.83	
Z0222	TO-92A(A)	12 Volt Zener Diode 500mW	.83	
Z0225	TO-92A(A)	15 Volt Zener Diode 500mW	.83	
Z0228	TO-92A(A)	18 Volt Zener Diode 500mW	.83	 Case 643A
Z0230	TO-92A(A)	20 Volt Zener Diode 500mW	.83	
Z0231	TO-92A(A)	22 Volt Zener Diode 500mW	.83	
Z0234	TO-92A(A)	27 Volt Zener Diode 500mW	.83	
Z0254	TO-92A(A)	130 Volt Zener Diode 500mW	1.67	
Z0255	TO-92A(A)	140 Volt Zener Diode 500mW	1.67	
Z0401	DO-41	3.3 Volt Zener Diode 1 Watt	1.22	
Z0402	DO-41	3.6 Volt Zener Diode 1 Watt	1.22	
Z0403	DO-41	3.9 Volt Zener Diode 1 Watt	1.22	
Z0405	DO-41	4.7 Volt Zener Diode 1 Watt	1.22	
Z0406	DO-41	5.1 Volt Zener Diode 1 Watt	1.22	
Z0407	DO-41	5.6 Volt Zener Diode 1 Watt	1.22	
Z0408	DO-41	6.2 Volt Zener Diode 1 Watt	1.22	
Z0409	DO-41	6.8 Volt Zener Diode 1 Watt	1.22	
Z0410	DO-41	7.5 Volt Zener Diode 1 Watt	1.22	 Case 644A
Z0411	DO-41	8.2 Volt Zener Diode 1 Watt	1.22	
Z0412	DO-41	9.1 Volt Zener Diode 1 Watt	1.22	
Z0413	DO-41	10 Volt Zener Diode 1 Watt	1.22	
Z0414	DO-41	11 Volt Zener Diode 1 Watt	1.22	
Z0415	DO-41	12 Volt Zener Diode 1 Watt	1.22	
Z0416	DO-41	13 Volt Zener Diode 1 Watt	1.22	
Z0417	DO-41	14 Volt Zener Diode 1 Watt	1.22	
Z0418	DO-41	15 Volt Zener Diode 1 Watt	1.22	
Z0419	DO-41	16 Volt Zener Diode 1 Watt	1.22	

HEP No	Case Style	Description	Suggested Net Price	Case Outline
Z0420	DO-41	18 Volt Zener Diode 1 Watt	1.22	
Z0421	DO-41	20 Volt Zener Diode 1 Watt	1.22	
Z0422	DO-41	22 Volt Zener Diode 1 Watt	1.22	
Z0423	DO-41	24 Volt Zener Diode 1 Watt	1.22	
Z0424	DO-41	27 Volt Zener Diode 1 Watt	1.22	
Z0426	DO-41	33 Volt Zener Diode 1 Watt	1.22	
Z0427	DO-41	36 Volt Zener Diode 1 Watt	1.22	
Z0428	DO-41	39 Volt Zener Diode 1 Watt	1.22	
Z0430	DO-41	47 Volt Zener Diode 1 Watt	1.22	
Z0432	DO-41	56 Volt Zener Diode 1 Watt	1.22	
Z0433	DO-41	62 Volt Zener Diode 1 Watt	1.22	
Z0436	DO-41	82 Volt Zener Diode 1 Watt	1.22	
Z0438	DO-41	100 Volt Zener Diode 1 Watt	1.22	Case 647
Z0439	DO-41	110 Volt Zener Diode 1 Watt	1.99	
Z0440	DO-41	120 Volt Zener Diode 1 Watt	1.99	
Z0442	DO-41	150 Volt Zener Diode 1 Watt	1.99	
Z0444	DO-41	180 Volt Zener Diode 1 Watt	1.99	
Z0445	DO-41	200 Volt Zener Diode 1 Watt	1.99	
Z2500	Case 17	3.3 Volt Zener Diode 5 Watt	2.20	
Z2502	Case 17	3.9 Volt Zener Diode 5 Watt	2.20	
Z2504	Case 17	4.7 Volt Zener Diode 5 Watt	2.20	
Z2506	Case 17	5.6 Volt Zener Diode 5 Watt	2.20	
Z2508	Case 17	6.2 Volt Zener Diode 5 Watt	2.20	
Z2510	Case 17	7.5 Volt Zener Diode 5 Watt	2.20	
Z2513	Case 17	9.1 Volt Zener Diode 5 Watt	2.20	
Z2514	Case 17	10 Volt Zener Diode 5 Watt	2.20	Case 648
Z2516	Case 17	12 Volt Zener Diode 5 Watt	2.20	
Z2519	Case 17	15 Volt Zener Diode 5 Watt	2.20	
Z2522	Case 17	18 Volt Zener Diode 5 Watt	2.20	
Z2525	Case 17	22 Volt Zener Diode 5 Watt	2.20	
Z2526	Case 17	24 Volt Zener Diode 5 Watt	2.20	
Z2528	Case 17	27 Volt Zener Diode 5 Watt	2.20	
Z2530	Case 17	30 Volt Zener Diode 5 Watt	2.20	
Z2531	Case 17	33 Volt Zener Diode 5 Watt	2.20	
Z2537	Case 17	56 Volt Zener Diode 5 Watt	2.20	
Z2542	Case 17	82 Volt Zener Diode 5 Watt	2.20	
Z2545	Case 17	100 Volt Zener Diode 5 Watt	2.20	
Z2547	Case 17	120 Volt Zener Diode 5 Watt	3.35	
Z2548	Case 17	130 Volt Zener Diode 5 Watt	3.35	
Z2551	Case 17	160 Volt Zener Diode 5 Watt	3.35	
Z3500	DO-4(A)	3.9 Volt Zener Diode 10 Watt	5.65	
Z3502	DO-4(A)	4.7 Volt Zener Diode 10 Watt	5.65	
Z3504	DO-4(A)	5.6 Volt Zener Diode 10 Watt	5.65	
Z3505	DO-4(A)	6.2 Volt Zener Diode 10 Watt	5.65	
Z3507	DO-4(A)	7.5 Volt Zener Diode 10 Watt	5.65	
Z3511	DO-4(B)	9.1 Volt Zener Diode 10 Watt	5.45	Case 656
Z3512	DO-4(B)	10 Volt Zener Diode 10 Watt	5.45	
Z3514	DO-4(B)	12 Volt Zener Diode 10 Watt	5.45	
Z3516	DO-4(B)	15 Volt Zener Diode 10 Watt	5.45	
Z3518	DO-4(B)	18 Volt Zener Diode 10 Watt	5.45	
Z3520	DO-4(B)	22 Volt Zener Diode 10 Watt	5.45	
Z3522	DO-4(B)	27 Volt Zener Diode 10 Watt	5.45	
Z3524	DO-4(B)	33 Volt Zener Diode 10 Watt	5.45	
Z3530	DO-4(B)	56 Volt Zener Diode 10 Watt	5.45	
Z3534	DO-4(B)	82 Volt Zener Diode 10 Watt	5.45	
Z3536	DO-4(B)	100 Volt Zener Diode 10 Watt	5.45	Case 686

Complete Replacement Guide
Available On Request

RCA INTEGRATED CIRCUITS

LINEAR INTEGRATED CIRCUITS



RCA's Integrated Circuits are manufactured in modern, laminar-flow, super-clean-room facilities. Experienced design, engineering, and manufacturing activities direct every aspect of integrated circuit production. Linear integrated circuits are supplied in low-silhouette TO-5 cases with 8, 10, or 12 leads, and 10 formed leads, in a ceramic flat-pack with 14 leads, in 14 & 16 lead dual in-line plastic or ceramic packages, and in 14-lead, 16-lead, or 20-lead quad-in-line plastic packages. RCA Digital Integrated Circuits are supplied in the 14 &16-lead ceramic flat-packs, 14 & 16-lead dual in-line plastic or ceramic packages, and a 12-lead TO-5 style package. Others are indicated in the copy below. Additional information is in RCA's IC-42 (I-C Manual at $2.50 net).

LINEAR INTEGRATED CIRCUITS

MICROPOWER–SINGLE OTA

Cat. No.	Pkg. Type	P.S. V	P_D mW	V_{IO} mV	I_{IO} YA	I_{IB} YA	A_{OL} dB Min.	Net 1-99	100-999
31-CA3080	8L TO-5	34	.02›10	5	0.6	5	6,700†	$0.97	$0.71
31-CA3080A	8L TO-5	34	.01›10	5	0.2	5	7.700†	3.22	2.34
MICROPOWER–TRIPLE OTA									
31-CA3060AD	16L DIC	36	...	5	1	5	10,200†	5.78	4.20
31-CA3060BD	16L DIP	36	...	5	1	5	10,200†	9.80	7.15
31-CA3060D	16L DIC	14	...	5	1	5	10,200†	8.16	5.95
31-CA3060E	16L DIP	36	...	5	1	5	10,200†	2.31	1.68
MICROPOWER–SINGLE OPERATIONAL AMPLIFIER									
31-CA3078AT	8L TO-5	36	0.24	3.5	0.0025	0.012	92	8.17	5.94
31-CA3078T	8L TO-5	14	0.1	—4.5	0.032	0.17	88	3.95	2.85
31-CA6078AT	8L TO-5	36	0.24	3.5	0.0025	0.012	92	9.90	7.20
(LOW-BURST NOISE VERSION OF CA3078AT)									
31-CA6741T	8L TO-5	44	50	5	0.2	0.5	94	5.45	3.96
(LOW-BURST NOISE VERSION OF CA3741T)									
GENERAL PURPOSE									
31-CA3458T	8L TO-5	36	50	6	0.2	0.5	86	1.40	1.20
31-CA3558T	8L TO-5	44	50	5	0.2	0.5	94	4.10	3.00
31-CA3741CT	8L TO-5	36	50	6	0.2	0.5	86	.80	.69
31-CA3741T	8L TO-5	44	50	5	0.2	0.5	94	2.50	1.95
31-CA3747CE	14L DIP	44	50	6	0.2	0.5	86	2.70	1.95
31-CA3747CT	10L TO-5	36	50	6	0.2	0.5	86	2.10	1.50
31-CA3747E	14L DIP	44	50	5	0.2	0.5	94	2.70	1.95
31-CA3747T	10L TO-5	44	50	5	0.2	0.5	94	5.45	3.95
31-CA3748CT	8L TO-5	36	50	6	0.2	0.5	86	1.30	.95
31-CA3748T	8L TO-5	44	50	5	0.2	0.5	94	2.00	1.50
WIDE-BAND									
31-CA3008	14L FP	20	30	5	5	12	57	3.14	2.28
31-CA3008A	14L FP	20	40	2	1.5	4	57	5.10	3.72
31-CA3010	12L TO-5	20	30	5	5	12	57	.89	.65
31-CA3010A	12L TO-5	20	40	2	1.5	4	57	1.07	.78
31-CA3015	12L TO-5	40	175	5	5	24	66	2.14	1.56
31-CA3015A	12L TO-5	40	175	2	1.6	6	66	3.05	2.22
31-CA3016	14L FP	40	175	5	5	24	66	4.30	3.12
31-CA3016A	14L FP	40	175	2	1.6	6	66	6.52	4.75
31-CA3029	14L DIP	20	30	5	5	12	57	.81	.59
31-CA3029A	14L DIP	20	40	2	1.5	4	57	.98	.71
31-CA3030	14L DIP	40	175	5	5	24	66	1.82	1.32
31-CA3030A	14L DIP	40	175	2	1.6	6	66	2.72	1.98
31-CA3037	14L DIC	20	30	5	5	12	57	2.80	2.04
31-CA3037A	14L DIC	20	40	2	1.5	4	57	4.29	3.12
31-CA3038	14L DIC	40	175	5	5	24	66	4.29	3.12
31-CA3038A	14L DIC	40	175	2	1.6	6	66	5.78	4.20
HIGH–CURRENT									
31-CA3033	14L DIC	26	120	5	0.035	0.35	84	4.79	3.48
31-CA3033A	14L DIC	38	250	5	0.025	0.2	90	8.09	5.88
31-CA3047	14L DIP	26	120	5	0.035	0.35	84	2.61	1.90
31-CA3047A	14L DIP	38	250	5	0.025	0.2	90	4.79	3.48

PACKAGED CIRCUIT FUNCTIONS

OPERATIONAL LINEAR AMPLIFIERS

Cat. No.	Pkg. Type	Supply Voltage	I_{OUT} A max.	P_{OUT} W RMS	Net 1-24	25-99
31-HC2000H	HCH	75	7	100	$35.00	$35.00

DUAL DARLINGTONS

Cat. No.	Pkg. Type	Supply Voltage	Peak Current	I Gain Min.	A.	Net 1-24	25-99
31-HC3000	TO-3▪	70	10	600	3	$7.01	$7.01
31-HC3100	TO-3▪	120	10	650	2	6.90	6.90

SERIES VOLTAGE REGULATORS

Cat. No.	Pkg. Type	V_{OUT} V.	% Reg.	I_{LOAD} A.	Net 1-24	25-99
31-HC4005	TO-3▪	5	3	4	$11.00	$11.00
31-HC4005A	TO-3▪	5	1	4	11.50	11.50
31-HC4012	TO-3▪	12	3	4	11.00	11.00
31-HC4012A	TO-3▪	12	1	4	11.50	11.50
31-HC4015	TO-3▪	15	3	4	11.00	11.00
31-HC4015A	TO-3▪	15	1	4	11.50	11.50

▪Modified.

RCA LINEAR I-C's CONTINUED

DIODE ARRAYS—INDIVIDUAL

Cat. No.	Pkg. Type	V_F V	$V_{(BR)R}$ V	I_R nA	V_{F1}-V_{F2} mV	C_D pF	Net 1-99	100-999
31-CA3019	10L TO-5	0.73	6	5.5	1	1.8	$1.62	$1.18

DIODE ARRAYS—QUAD PLUS TWO

Cat. No.	Pkg. Type	P.S. V	PD mW	I_{IO} A	I_{IB} YA	Aa dB min.	Net 1-99	100-999
31-CA3039	12L TO-5	0.73	7	0.016	0.5	0.65	$1.61	$1.17

TRANSISTOR ARRAYS—GENERAL PURPOSE—NPN

Cat. 31-★	Pkg. Type	V_{CBO} V.	V_{CEO} V.	V_{EBO} V.	h_{Fe} h_{FE}*	f_T MHz	Net 1-99	100-999
CA3081	16L DIP	60	24	6.9	70*	. . .	$2.40	$1.70
CA3082	16L DIP	60	24	6.9	70*	. . .	2.40	1.70
CA3083	16L DIP	60	24	6.9	75*	. . .	2.06	1.50
CA3086	14L DIP	60	24	7	100*	. . .	.81	.59
CA3183AE	16L DIP	50	40	5	40*	550	2.48	1.80
CA3183E	16L DIP	40	30	5	40*	550	2.06	1.50

GENERAL PURPOSE—PNP

CA3084	14L DIP	-80	-70	-100	40*	. . .	2.95	2.15

GENERAL PURPOSE—PNP & NPN

CA3096AE	16L DIP	100	50	-100	47*	. . .	2.64	1.92
CA3096E	16L DIP	100	50	-100	47*	. . .	2.06	1.50

GENERAL PURPOSE
3 TRANSISTORS, 2 ZENER DIODES, 1 DIODE

CA3093E	16L DIP	60	24	6.9	75*	. . .	2.23	1.62

GENERAL PURPOSE—DUAL DARLINGTON CONNECTED

CA3036	10L TO-5	44	20	6	82	200	1.47	1.07
CA3050	14L DIC	60	24	7	. .	600	3.71	2.70
CA3051	14L DIP	60	24	7	. .	600	2.72	1.98

GENERAL PURPOSE
DARLINGTON CONNECTED PAIR PLUS TWO INDIVIDUAL

CA3018	12L TO-5	60	24	7	110	500	1.45	1.06
CA3018A	12L TO-5	60	24	7	110	500	2.06	1.50
CA3118AT	12L TO-5	72	56	7	10	500	2.31	1.68
CA3118T	12L TO-5	72	56	7	100*	500	1.62	1.18

GENERAL PURPOSE
DIFF. CONNECTED PAIR PLUS THREE INDIVIDUAL

CA3045	14L DIC	60	24	7	110	550	2.66	1.94
CA3046	14L DIP	60	24	7	110	550	1.45	1.06
CA3086	14L DIP	60	24	7	100	550	.81	.59
CA3146AE	14L DIP	72	56	7	100*	500	2.31	1.68
CA3146E	14L DIP	72	56	7	100*	500	1.62	1.18

GENERAL PURPOSE
SUPER BETA DIFF. AMPLI. PLUS 3 N-P-N TRANS.

For each conventional N-P-N Transistor

CA3095E	16L DIP	95	50	8	300*	100	4.75	3.75

For each super beta cascode amplifier transistor:

		6 min.	45• min.	8	2000*	78		

•$V_{(BR)}$ CIO value.

AMPLIFIER ARRAYS
DUAL INDEPENDENT (DIFFERENTIAL)

Cat. No.	Pkg. Type	A Gp* dB	nF dB	f_T MHz	Net 1-99	100-999
31-CA3026	12L TO-5	60	8	550	$2.06	$1.50
31-CA3049	12L TO-5	23*	4.6	1300	3.22	2.34
31-CA3054	14L DIP	60	8	550	2.06	1.50

THREE AMPLIFIER

31-CA3035	10L TO-5	44	6	. . .	$2.48	$1.80
31-CA3035V1	10L TO-5	44	6	. . .	2.48	1.80

FOUR AMPLIFIER

31-CA3048	16L DIP	53	2	0.64	$4.04	$2.94

BROADBAND (VIDEO) AMPLIFIERS

Cat. 31-★	Pkg. Type	P_D mW	Supply -V	Supply +V	Range MHz	A dB	NF dB	Net 1-99	100-999
CA3002	10L TO-5	55	-6	6	DC to 15	24	4	$3.71	$2.70
CA3011	10L TO-5	187	0	7.5	0.1 to 20	70	8.7	1.47	1.07
CA3012	10L TO-5	167	0	7.5	0.1 to 20	70	8.7	1.82	1.32
CA3020	12L TO-5	. .	0	9	DC to 9	75	. .	2.56	1.86
CA3020A	12L TO-5	. .	0	9	DC to 8	75	. .	3.26	2.37
CA3021	12L TO-5	8	0	6	DC to 6	56	4.2	3.14	2.28
CA3022	12L TO-5	24	0	6	DC to 20	57	4.4	2.64	1.92
CA3023	12L TO-5	48	0	6	DC to 40	53	6.5	2.56	1.86
CA3040	12L TO-5	. .	-6	6	DC to 200	37	9	4.87	3.54

*Units are in μA.

DIFFERENTIAL AMPLIFIERS

Cat. 31-★	Pkg. Type	V_{IO} mV	I_{IA} YA	G_p dB	BW MHz	NF dB	Net 1-99	100-999
CA3000	10L TO-5	1.4	1.2	. .	0.65	. .	$3.80	$2.76
CA3001	12L TO-5	1.5	1	. .	29	5	5.55	4.00
CA3004	12L TO-5	1.7	0.125	12	18	6.3	3.71	2.70
CA3005	12L TO-5	2.6	1.4	30	18	7.8	2.48	1.80
CA3006	12L TO-5	0.8	1.4	20	18	7.8	5.80	4.20
CA3007	12L TO-5	0.57	0.57	22	0.01	. .	5.35	3.90
CA3026	12L TO-5	0.45	0.3	. .	. .	8	2.06	1.50
CA3028A	8L TO-5	0.98	0.56	39	8	. .	1.47	1.07
CA3028B	8L TO-5	0.98	0.56	39	8	. .	2.06	1.50
CA3049	12L TO-5	. .	. .	23	. .	4.6	3.22	2.34
CA3050	14L DIC	1.5	7	. .	4.3	. .	3.71	2.70
CA3051	14L DIP	1.5	7	. .	4.3	. .	2.72	1.98
CA3053	8L TO-5	. .	. .	39	8	. .	.81	.51
CA3054	14L DIP	0.45	0.3	. .	. .	8	2.06	1.50

POWER CONTROL—THYRISTOR CONTROL

Cat. No.	Pkg. Type	I_{GT}mA @Iv	tp* ys	tn* ys	Net 1-99	100-999
31-CA3058	14L DIC	105	100	100	$5.80	$4.20
31-CA3059	14L DIP	105	100	100	3.20	2.35
31-CA3079	14L DIP	105	100	100	1.63	1.19

*Total gate pulse duration @ 50-60Hz.

POWER CONTROL SWITCH/AMPLIFIER

Cat. 31-★	Pkg. Type	Operat. Voltage	I_{OUT} Av.	I_{OUT} Pk.	Features	Net 1-99	100-999
CA3094T	8L TO-5	up to 24	100	300	▪Programmable	$.90	$.75
CA3094AT	8L TO-5	up to 36	100	300	▪Oper. with single or dual supply	1.63	1.19
CA3094BT	8L TO-5	up to 44	100	300	▪Output "sink" or "Drive"	2.29	1.67

PHOTO DETECTOR

Cat. No.	Pkg. Type	Overall Response* t_r	t_f	t_{on}	t_{off}	Net 1-99	100-999
31-CA3062	12L TO-5	125	20	38	43	$4.86	$3.54

*Inys, E = 700μW/cm², λ = 930mm.

VOLTAGE REGULATORS

Cat. No.	Pkg. Type	V Ref.	V_1 Min.	V_1 Max.	V_O Min.	V_O Max.	Net 1-99	100-999
31-CA3085	8L TO-5	1.6	7.5	30	1.6	27	$0.98	$0.71
31-CA3085A	8L TO-5	1.6	7.5	40	1.6	37	2.39	1.74
31-CA3085B	8L TO-5	1.6	7.5	50	1.6	47	6.52	4.74

COMPUTER INTERFACE CIRCUITS—SENSE AMPLIFIERS

Cat. No.	Pkg. Type	P_D mW	Supply V	V_{IO} V.	t_{cmr} ns	t_{DR} ns	Net 1-99	100-999
31-CA3541D	14L DIC	750	10	6	15	30	$9.90	$7.20

DECODER DEVICES

Cat. No.	Pkg. Type	P_D mW	Sup. V.	V_{IO} V.	t_{cmr} ns	t_{DR} ns	Net 1-99	100-999
31-CD2500E	16L DIP	0.85	2	0.4	8	50	$4.62	$3.36
31-CD2501E	16L DIP	0.85	2	0.4	8	48	4.62	3.36
31-CD2502E	16L DIP	0.85	2	1	8	50	4.95	3.60
31-CD2503E	16L DIP	0.85	2	1	8	48	4.95	3.60

ANALOG MULTIPLIER

Cat. 31-★	Pkg. Type	P_D mW	Sup. V.	% Accur.	Linearity	BW MHz	Net 1-99	1-99 999
CA3091D	14L DIC	200	18	4	3	4.8	$10.70	$7.80

ALL LINEAR Devices in 8-Lead TO-5 packages can be supplied on request in the Dual-in-Line Formed-Lead version (DIL-CAN) designated by the suffix letter S (e.g., the DIL-CAN version of the CA3741T would be designated CA3741S).

CONSUMER APPLICATIONS

Cat. No.	Pkg. Type	A dB	THD %	A_{OL} dB	BW MHz	Net 1-99	100-999
31-CA3052	16L DIP	53	0.65	58	0.3	$3.14	$2.28

MULTIPLEX DECODER

Cat. No.	Pkg. Type	Z_{IN} ohms	Channel Separation	THD %	Net 1-99	100-999
31-CA3090Q	16L QUIP	50K	40dB	0.45	$7.43	$5.43

AM/FM RECEIVER CIRCUITS

Cat. No.	Pkg. Type	A dB	THD %	Detector Output	Net 1-99	100-999
31-CA3088E	16L DIP	30	1	75mv RMS	$2.31	$1.68

CONTINUED ON NEXT PAGE

RCA LINEAR I-C's CONTINUED

FM IF SUBSYSTEMS

Cat. No.	Pkg. Type	A dB	THD %	$V_{I(lim)}$ µA	P_D mW	Net 1-99	100-999
31-CA3013	10L TO-5	67	1.8	300	120	$2.15	$1.56
31-CA3014	10L TO-5	67	1.8	300	120	2.48	1.80
31-CA3043	12L TO-5	80	1	50	225	2.81	2.04
31-CA3075	14L QUIP	21	1	250	429	2.31	1.68
31-CA3089E	16L DIP	43	0.1	12	600	3.63	2.64

FM IF GAIN BLOCKS

Cat. No.	Pkg. Type	A dB	THD %	$V_{I(lim)}$ µA	P_D mW	Net 1-99	100-999
31-CA3011	10L TO-5	66	..	300	133	$1.47	$1.07
31-CA3012	10L TO-5	66	..	300	121	1.82	1.32
31-CA3076	8L TO-5	80	..	50	430	2.64	1.90

REMOTE CONTROL

Cat. No.	Pkg. Type	BW MHz	A dB	NF dB	Sensitivity µA	Net 1-99	100-999
31-CA3035	10L TO-5	2.5	44	6	100	$2.48	$1.80
31-CA3035VI	10L TO-5	2.5	44	6	100	2.48	1.80

*Include complete Cat. No. when ordering.

AUTOMATIC FINE TUNING

Cat. 31-*	Pkg. Type	Y_{11} m mho	Y_{21} m mho	Y_{22} m mho	Net 1-99	100-999
CA3044	10L TO-5	.5+j1.1	-11.7+j .1	.077+j.9	$2.31	$1.68
CA3044V1	10L TO-5	.5†j1.1	-11.7+j .1	.077+j.9	2.31	1.68
CA3064	10L TO-5	.41+j1.0	24.5+j29	.04†j.9	2.31	1.68

IF SYSTEMS—SOUND

Cat. 31-*	Pkg. Type	V_{IN} YV	Recov. V AF	Audio Gain dB	Audio R_{OUT}	Net 1-99	100-999
CA2111AE	14L DIP	250	720	60	2K	$1.73	$1.16
CA2111AQ	14L QUIP	250	720	60	2K	1.73	1.16
CA3041	14L QUIP	150	250	40	30K	2.06	1.50
CA3042	14L QUIP	150	250	10	250	2.06	1.50
CA3065	14L QUIP	200•	750	20	270	2.31	1.68

IF SYSTEMS—VIDEO

Cat. 31-*	Pkg. Type	Sensi-tivity	AFT Drive	Sync Tip	Chroma Output	Sound Output	Net 1-99	100-999
CA3068	20L QUIP	100µv	15mv	0.8v	0.8v	.2v	$4.95	$3.60

CHROMA SIGNAL PROCESSORS

Cat. 31-*	Pkg. Type	Oscillator Outputs Vp-p	ACC Outputs mV	Chroma Output Vp-p	Net 1-99	100-999
CA3020E	16L DIP	"Jungle" circuit-incorporates sync separator, noise inverter, AGC, comparator, and versatile RF AGC delay ampli.			$3.26	$2.37
CA3066	16L QUIP	2.5	900	1	4.29	3.12
CA3070	16L DIP	1	150	..	3.47	2.52

CHROMA AMPLIFIER

Cat. 31-*	Pkg. Type	Ampli. No. 1 A dB	Ampli. No. 1 BW MHz	Ampli. No. 2 A dB	Ampli. No. 2 BW MHz	Output Vrms	Net 1-99	100-999
CA3071	14L DIP	17.5	12	14	30	2	$3.30	$2.40

CHROMA SYSTEMS—CHROMA DEMODULATORS

Cat. 31-*	Pkg. Type	r_O ohms	Color V_O Offset	Color Outputs R-Y Vp-p	Color Outputs G-Y Vp-p	Color Outputs B-Y Vp-p	Net 1-99	100-999
CA3021E	16L DIP	Provides complete system for processing chroma when used with RCA CA3070					$3.14	$2.28
CA3067	16L QUIP	5	±0.3	3	1.1	3.6	4.46	3.23
CA3072	14L DIP	180	±0.6	8	2	10	3.38	2.46

LINEAR INTEGRATED CIRCUIT CHIPS

Cat. 31-*	Description	Net 10-99	100-999
CA3000H	DC Amplifier	$2.76	$2.21
CA3001H	Video and Wide-Band Amplifier	3.77	3.22
CA3002H	IF Amplifier	2.71	2.16
CA3005H	RF Amplifier	1.99	1.44
CA3012H	FM IF Amplifier	1.61	1.06
CA3015H	Operational Amplifier	1.80	1.25
CA3018H	Two Individual Transistors and a Darlington-Connected Transistor Pair	1.39	.84
CA3019H	Diode "Quad" and 2 Diodes	1.49	.94
CA3020H	Multi-purpose Wide-Band Power Amplifiers	2.04	1.49
CA3023H	Low-Power Video & Wide-Band Amplifier	2.04	1.49
CA3026H	Dual Independent Diff. Ampl.	1.75	1.20
CA3028AH	Differential/Cascode Amplifier	1.40	.85
CA3033H	High-Current Operational Amplifier	3.34	2.79
CA3035H	3-Amplifier Array	1.99	1.44
CA3039H	6 Matched Diodes	1.49	.94
CA3043H	FM IF Amplifier/Limiter/FM Detector/AF Preamplifier/Driver	2.18	1.63
CA3045H	3 Individual Transistors and 1 Differentially-Connected Transistor Pair	1.39	.84
CA3048H	4-Amplifier Array	2.90	2.35
CA3049H	Dual Independent Differential RF/IF Amplifier	2.42	1.87
CA3054H	Dual Independent Differential Amplifier	1.56	1.01
CA3059H	Zero-Voltage Switch	2.42	1.87
CA3060H	Triple Operational Transconductance Amplifier Array	2.42	1.87
CA3075H	FM IF Amplifier-Limiter/Detector/Audio Preamplifier	1.90	1.35
CA3076H	High-Gain Wide Band IF Amplifier/Limiter	2.09	1.54
CA3078H	Micropower Operational Amplifier	2.42	1.87
CA3080H	Operational Transconductance Amplifier	1.11	.56
CA3081H	General-Purpose High-Current NPN Transistor Array (Common Emitter)	1.89	1.34
CA3082H	General-Purpose High-Current NPN Transistor Array (Common Collector)	1.89	1.34
CA3083H	General-Purpose High Current NPN Transistor Array	1.75	1.20
CA3084H	General-Purpose PNP Transistor Array	2.27	1.72
CA3085H	Voltage Regulator	1.19	.64
CA3091H	Four Quardrant Multiplier	6.79	6.24
CA3093H	Transistor-Zener/Diode Array	1.85	1.30
CA3118H	High-Voltage Transistor Array	1.49	.94
CA3146H	High-Voltage Transistor Array	1.49	.94
CA3183H	High-Voltage Transistor Array	1.75	1.20
CA3541H	Dual-Input Memory Sense Amplifier	6.31	5.76
CA3741CH	Operational Amplifier with Internal Phase Compensation	1.17	.62
CA3747CH	Operational Amplifier	1.75	1.20
CA3748CH	Operational Amplifier	1.22	.67

NOTE: The maximum permissible junction temperature for these chips is 150°C.

RCA COS/MOS

Static Characteristics and Maximum Ratings common to RCA CD4000AD, AK, and AT COS/MOS Series

MAXIMUM RATINGS

Storage Temperature Range	-65 to +150°C
Operating Temperature Range:	
CD4000AD, AK, AT Series	-55 to +125°C
CD4000AE Series	-40 to +85°C
DC Supply Voltage Ramp (V_{DD}-V_{SS})	-.05 to +15 V
Device Dissipation (per pkg.)	200mW
All Inputs	$V_{SS} \le V_I \le V_{DD}$
Recommended DC Supply Voltage Range (V_{DD}-V_{SS})	3 to 15 V
Lead Temperature (During soldering)	265°C

STATIC CHARACTERISTICS @ T_A=25°C, V_{DD}-V_{SS}=10V

Noise Immunity	V_{NL} or V_{NH}	4.5 V typ.
Output Voltage:		
Low-level	V_{OL}	0.01V max.
High-level	V_{OH}	9.99V min.
Threshold Voltage:		
N-Channel	V_{THN}	1.5V typ.
P-Channel	V_{THP}	1.5V typ.

RCA COS/MOS DIGITAL INTEGRATED CIRCUITS
CONTINUED ON NEXT PAGE

RCA COS/MOS

GATES

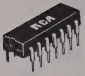
NOR/NAND

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns		Sink (I_{DN}) mA		Source (I_{DP}) mA		Net 1-24	25-99
		V_{DD} — 5	V 10	V_{DD} — 5	V 10	V_{DD} — 5	V 10		
31-CD4000AD	14L DIC	35	25	1	2.5	-2	-1	$4.70	$3.77
31-CD4000AE	14L DIP	35	25	1	2.5	-2	-1	1.17	.94
31-CD4000AK	14L FP	35	25	1	2.5	-2	-1	4.70	3.77
31-CD4001AD	14L DIC	35	25	1	2.5	-2	-1	4.95	3.99
31-CD4001AE	14L DIP	35	25	1	2.5	-2	-1	1.17	.94
31-CD4001AK	14L FP	35	25	1	2.5	-2	-1	4.95	3.99
31-CD4002AD	14L DIC	35	25	1	2.5	-2	-1	5.10	4.13
31-CD4002AE	14L DIP	35	25	1	2.5	-2	-1	1.17	.94
31-CD4002AK	14L FP	35	25	1	2.5	-2	-1	5.10	4.13
31-CD4011AD	14L DIC	50	25	0.5	0.6	-0.5	-1.2	4.95	3.99
31-CD4011AE	14L DIP	50	25	0.5	0.6	-0.5	-1.2	1.17	.94
31-CD4011AK	14L FP	50	25	0.5	0.6	-0.5	-1.2	4.95	3.99
31-CD4012AD	14L DIC	100	50	0.25	0.6	-0.5	-1.2	5.20	4.18
31-CD4012AE	14L DIP	100	50	0.25	0.6	-0.5	-1.2	1.17	.94
31-CD4012AK	14L FP	100	50	0.25	0.6	-0.5	-1.2	5.20	4.18
31-CD4023AD	14L DIC	50	25	0.5	0.6	-0.5	-1.2	5.20	4.18
31-CD4023AE	14L DIP	50	25	0.5	0.6	-0.5	-1.2	1.17	.94
31-CD4023AK	14L FP	50	25	0.5	0.6	-0.5	-1.2	5.20	4.18
31-CD4025AD	14L DIC	35	25	1	2.5	-2	-1	5.20	4.18
31-CD4025AE	14L DIP	35	25	1	2.5	-2	-1	1.17	.94
31-CD4025AK	14L FP	35	25	1	2.5	-2	-1	5.20	4.18
MULTILEVEL/FUNCTIONAL									
31-CD4019AD	16L DIC	100	50	1.5	2.5	-0.5	-1.5	$7.55	$6.09
31-CD4019AE	16L DIP	100	50	1.5	2.5	-0.5	-1.5	2.86	2.31
31-CD4019AK	16L FP	100	50	1.5	2.5	-0.5	-1.5	7.55	6.09
31-CD4030AD	14L DIC	100	40	1.2	2.4	-0.6	-1.3	5.69	4.58
31-CD4030AE	14L DIP	100	40	1.2	2.4	-0.6	-1.3	2.45	1.97
31-CD4030AK	14L FP	100	40	1.2	2.4	-0.6	-1.3	5.69	4.58
31-CD4037AD	14L DIC	250	75	1.2	2	-1	-1.6	8.86	7.14
31-CD4037AE	14L DIP	250	75	1.2	2	-1	-1.6	4.55	3.67
31-CD4037AK	14L FP	250	75	1.2	2	-1	-1.6	8.86	7.14
31-CD4048AD	16L DIC	1400*	750*	3.2	9	-3.2	-9	15.00	....
31-CD4048AE	16L DIP	1400*	750*	3.2	9	-3.2	-9	....	....
31-CD4048AK	16L FP	1400*	750*	3.2	9	-3.2	-9	....	....
BUFFERS & INVERTERS									
31-CD4007AD	14L DIC	35	20	1	2.5	-4	-2.5	$3.95	$3.19
31-CD4007AE	14L DIP	35	20	1	2.5	-4	-2.5	1.17	.94
31-CD4007AK	14L FP	35	20	1	2.5	-4	-2.5	3.95	3.19
31-CD4009AD	16L FP	15*	10*	4	10	-1.75	-0.8	7.90	6.38
31-CD4009AE	16L DIC	15*	10*	4	10	-1.75	-0.8	2.54	2.04
31-CD4009AK	16L DIP	15*	10*	4	10	-1.75	-0.8	7.90	6.38
31-CD4010AD	16L FP	15*	10*	4	10	-1.75	-0.8	7.90	6.38
31-CD4010AE	16L DIC	15*	10*	4	10	-1.75	-0.8	2.54	2.04
31-CD4010AK	16L DIP	15*	10*	40	10	-1.75	-0.8	7.90	6.38
31-CD4041AD	14L DIC	65*	40*	3.2	10	-2.8	-8	8.86	7.14
31-CD4041AE	14L DIP	65*	40*	3.2	10	-2.8	-8	5.08	4.09
31-CD4041AK	14L FP	65*	40*	3.2	10	-2.8	-8	8.86	7.14
31-CD4049AD	16L DIC	15*	10*	6	16	-1	-2.5	7.11	5.73
31-CD4049AE	16L DIP	15*	10*	6	16	-1	-2.5	2.25	1.81
31-CD4049AK	16L FP	15*	10*	6	16	-1	-2.5	7.11	5.73
31-CD4050AD	16L DIC	15*	10*	6	16	-1	-2.5	7.11	5.73
31-CD4050AE	16L DIP	15*	10*	6	16	-1	-2.5	2.25	1.81
31-CD4050AK	16L FP	15*	10*	6	16	-1	-2.5	7.11	5.73

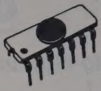
*t_{PLH} value.

FLIP-FLOPS

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns		Sink (I_{DN}) mA		Source (I_{DP}) mA		f_{CL} MHz		Net 1-24	25-99
		V_{DD} — 5	V 10	V_{DD} — 5	V 10	V_{DD} — 5	V 10	V_{DD} — 5	V 10		
31-CD4013AD	14L DIC	150	75	1	2.5	-0.5	-1.3	4	10	$7.10	$5.73
31-CD4013AE	14L DIP	150	75	1	2.5	-0.5	-1.3	4	10	2.43	1.96
31-CD4013AK	14L FP	150	75	1	2.5	-0.5	-1.3	4	10	7.10	5.73
31-CD4027AD	16L DIC	150	75	1	2.5	-0.5	-1.3	3	8	7.92	6.38
31-CD4027AE	16L DIP	150	75	1	2.5	-0.5	-1.3	3	8	3.76	3.03
31-CD4027AK	16L FP	150	75	1	2.5	-0.5	-1.3	3	8	7.92	6.38
LATCHES											
31-CD4042AD	16L DIC	150	75	1	2	-1	-2	3	10	$8.86	$7.14
31-CD4042AE	16L DIP	150	75	1	2	-1	-2	3	10	5.08	4.09
31-CD4042AK	16L FP	150	75	1	2	-1	-2	3	10	8.86	7.14
31-CD4043AD	16L DIC	150	75	0.5	1	-0.5	-1	4	10	8.86	7.14
31-CD4043AE	16L DIP	150	75	0.5	1	-0.5	-1	4	10	5.08	4.09
31-CD4043AK	16L FP	150	75	0.5	1	-0.5	-1	4	10	8.86	7.14
31-CD4044AD	16L DIC	150	75	0.5	1	-0.5	-1	4	10	8.86	7.14
31-CD4044AE	16L DIP	150	75	0.5	1	-0.5	-1	4	10	5.08	4.09
31-CD4044AK	16L FP	150	75	0.5	1	-0.5	-1	4	10	8.86	7.14
MULTIVIBRATORS											
31-CD4047AD	14L DIC	900	400	1	2.5	-1	-2.5	..	..	$9.00	$7.25
31-CD4047AE	14L DIP	900	400	1	2.5	-1	-2.5	..	..	4.50	3.63
31-CD4047AK	14L FP	900	400	1	2.5	-1	-2.5	..	..	9.00	7.25



RCA COS/MOS



SHIFT REGISTERS

STATIC

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4006AD	14L DIC	250	125	0.25	0.5	-0.15	-0.3	2.5	5	$13.70	$11.02
31-CD4006AE	14L DIP	250	125	0.25	0.5	-0.15	-0.3	2.5	5	5.83	4.70
31-CD4006AK	14L FP	250	125	0.25	0.5	-0.15	-0.3	2.5	5	13.70	11.02
31-CD4014AD	16L DIC	300	100	0.3	0.5	-0.16	-0.44	2.5	5	15.20	12.25
31-CD4014AE	16L DIP	300	100	0.3	0.5	-0.16	-0.44	2.5	5	6.35	5.12
31-CD4014AK	16L FP	300	100	0.3	0.5	-0.16	-0.44	2.5	5	15.20	12.25
31-CD4015AD	16L DIC	300	100	0.3	0.5	-0.16	-0.44	2.5	5	15.20	12.25
31-CD4015AE	16L DIP	300	100	0.3	0.5	-0.16	-0.44	2.5	5	6.35	5.12
31-CD4015AK	16L FP	300	100	0.3	0.5	-0.16	-0.44	2.5	5	15.20	12.25
31-CD4021AD	16L DIC	300	100	0.3	0.5	-0.16	-0.44	2.5	5	14.70	11.82
31-CD4021AE	16L DIP	300	100	0.3	0.5	-0.16	-0.44	2.5	5	6.35	5.12
31-CD4021AK	16L FP	300	100	0.3	0.5	-01.6	-0.44	2.5	5	14.70	11.82
31-CD4031AD	16L DIC	400	200	3	10	-0.6	-1.5	2	4	18.76	15.08
31-CD4031AE	16L DIP	400	200	3	10	-0.6	-1.5	2	4	11.65	9.38
31-CD4031AK	16L FP	400	200	3	10	-0.6	-1.5	2	4	18.76	15.08

PARALLEL-IN/PARALLEL-OUT

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4034AD	24L DIC	600	240	0.2	0.5	-0.1	-0.25	1.5	5	$18.00	$14.50
31-CD4034AK	24L FP	600	240	0.2	0.5	-0.1	-0.25	1.5	5	18.00	14.50
31-CD4035AD	16L DIC	250	100	1	2.5	-0.5	-1.3	1.5	5	9.48	8.72
31-CD4035AE	16L DIC	250	100	1	2.5	-0.5	-1.3	1.5	5	6.25	5.03
31-CD4035AK	16L FP	250	100	1	2.5	-0.5	-1.3	1.5	5	9.48	8.72
31-CD4058AD	24L DIC	600	240	0.2	0.5	-0.1	-0.25	1.5	5	....	....
31-CD4058AK	24L FP	600	240	0.2	0.5	-0.1	-0.25	1.5	5	....	....

COUNTERS

BINARY/RIPPLE

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4020AD	16L DIC	450	150	0.4	0.6	-0.25	-0.5	2.5	7	$18.00	$14.50
31-CD4020AE	16L DIP	450	150	0.4	0.6	-0.25	-0.5	2.5	7	7.07	5.70
31-CD4020AK	16L FP	450	150	0.4	0.6	-0.25	-0.5	2.5	7	18.00	14.50
31-CD4024AD	14L DIC	350	125	0.5	1	-0.3	-0.7	2.5	7	10.80	8.70
31-CD4024AE	14L DIP	350	125	0.5	1	-0.3	-0.7	2.5	7	4.55	3.67
31-CD4024AK	14L FP	350	125	0.5	1	-0.3	-0.7	2.5	7	10.80	8.70
31-CD4024AT	12L TO-5	350	125	0.5	1	-0.3	-0.7	2.5	7	13.50	10.88
31-CD4040AD	16L DIC	400	125	0.5	1	-0.5	-1	3	10	15.32	12.34
31-CD4040AE	16L DIP	400	125	0.5	1	-0.5	-1	3	10	6.75	5.44
31-CD4045AD	16L DIC	..	..	2.5	6	-2.5	-6	5	10	10.80	8.70
31-CD4045AE	16L DIP	..	..	2.5	6	-2.5	-6	5	10	6.30	5.08

SYNCHRONOUS

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4017AD	16L DIC	350	125	0.4	1	-0.4	-1	2.5	5	$15.90	$12.76
31-CD4017AE	16L DIP	350	125	0.4	1	-0.4	-1	2.5	5	6.35	5.12
31-CD4018AD	16L DIC	425	150	0.16	0.64	-0.12	-0.2	2.5	5	13.90	11.17
31-CD4018AE	16L DIP	425	150	0.16	0.64	-0.12	-0.2	2.5	5	6.35	5.12
31-CD4022AD	16L DIC	350	125	0.4	1	-0.4	-1	2.5	5	14.40	11.60
31-CD4022AE	16L DIP	350	125	0.4	1	-0.4	-1	2.5	5	6.14	4.94

DISPLAY COUNTER/DECODERS/DRIVERS

DECADE COUNTERS & 7-SEGMENT DECODERS

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4026AD	16L DIC	350	125	0.4	1	-0.4	-1	2.5	5	$18.00	$14.54
31-CD4026AE	16L DIP	350	125	0.4	1	-0.4	-1	2.5	5	8.48	6.83
31-CD4029AD	16L DIC	425	150	0.16	0.64	-0.12	-0.2	2.5	5	17.21	13.48
31-CD4029AE	16L DIP	425	150	0.16	0.64	-0.12	-0.2	2.5	5	9.52	7.67
31-CD4033AD	16L DIC	425	150	0.16	0.64	-0.12	-0.2	2.5	5	18.00	14.50
31-CD4033AE	16L DIP	425	150	0.16	0.64	-0.12	-0.2	2.5	5	8.37	6.74

MULTIPLEXERS

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4016AD	14L DIC	..	20	..	..	..	..	..	10	$7.75	$6.09
31-CD4016AE	14L DIP	..	20	..	..	..	..	..	10	2.43	1.96

ARITHMETIC CIRCUITS

BINARY ADDERS

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4008AD	16L DIC	320	120	0.5	1.5	-0.5	-1.5	..	..	$15.20	$12.25
31-CD4008AE	16L DIP	320	120	0.5	1.5	-0.5	-1.5	..	..	6.03	4.86
31-CD4032AD	16L DIC	800	250	0.9	2.4	-0.4	-1.2	2.5	5	10.37	8.35
31-CD4032AE	16L DIP	800	250	0.9	2.4	-0.4	-1.2	2.5	5	6.35	5.12
31-CD4038AD	16L DIC	800	250	0.9	2.4	-0.4	-1.2	2.5	5	10.37	8.35
31-CD4038AE	16L DIP	800	250	0.9	2.4	-0.4	-1.2	2.5	5	5.08	4.09

BCD–DECIMAL DECODERS

Cat. No.	Pkg. Type	t_{PHL}, t_{PLH} ns V_{DD} — V 5	10	$I_D N$ mA V_{DD} — V 5	10	$I_D P$ mA V_{DD} — V 5	10	f_{CL} MHz V_{DD} — V 5	10	Net 1-24	25-99
31-CD4028AD	16L DIC	250	100	1.2	2.4	-0.9	-1.9	..	..	$11.88	$9.56
31-CD4028AE	16L DIP	250	100	1.2	2.4	-0.9	-1.9	..	..	5.51	4.44

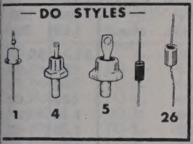
MEMORIES (RAMS)

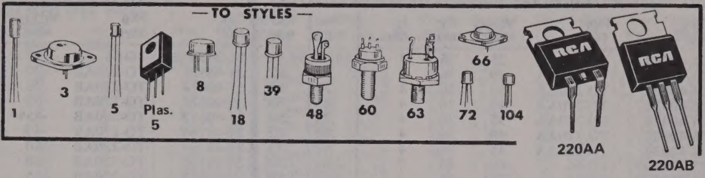
Cat. No.	Pkg. Type	Function	Net 1-24	25-99
31-CD4036AD	24L DIC	Binary Addressing; 4 x 8		
31-CD4036AK	24L FP	Binary Addressing; 4 x 8	$17.19	$13.85
31-CD4039AD	24L DIC	Direct Word-Line Addressing		

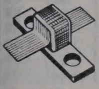
PHASE LOCKED LOOP

Cat. No.	Pkg. Type	Function	Net 1-24	25-99
31-CD4046AD	16L DIC	Operating Freq. to 500KHz,	$11.70	$9.43
31-CD4046AE		P = 600mW typ.	6.75	5.44

RCA SEMICONDUCTORS



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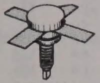
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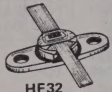
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HF31

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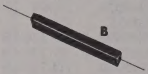
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Stud

Iso-s

PF

PL-S

Coax.

C

D

SIGNAL TRANSISTORS (MOS FETs) & POWER MOS FIELD EFFECT TRANSISTORS

30 MHz TO 300 MHz (VHF) PT TO 0.4W SI N-CHANNEL SINGLE-GATE

Cat. 31-★	Pkg. Type	VDS Max.	PT Max.	GPS @ 1 type. dB	Net 1-99	100-999
3N142	TO-72	20V	0.1W	24	$1.04	$0.76
3N138	TO-72	35V	0.15W	gfs=6000 μmho typ.	2.89	2.10
3N139	TO-72	35V	0.15W	14	2.48	1.80
40468A	TO-72	20V	0.375W	24	.75	.54
40559A	TO-72	20V	0.375W	21	.70	.51
3N128	TO-72	20V	0.4W	16	1.29	.94
3N143	TO-72	20V	0.4W	13.5	1.30	.95
3N152	TO-72	20V	0.4W	17	1.62	1.18
3N153	TO-72	20V	0.4W	gfs=10000 μmho typ.	1.42	1.02
3N154	TO-72	20V	0.4W	20	1.49	1.08
40467A	TO-72	20V	0.4W	20	1.24	.90

PT TO 0.4W, SI N-CHANNEL DUAL-GATE

3N140	TO-72	20V	0.4W	18	$1.62	$1.18
3N141	TO-72	20V	0.4W	17	1.45	1.06
3N159	TO-72	20V	0.4W	18	2.06	1.50
40600	TO-72	20V	0.4W	20	1.24	.90
40601	TO-72	20V	0.4W	14	1.16	.84
40602	TO-72	20V	0.4W	35	.83	.60
40603	TO-72	20V	0.4W	26	1.04	.76
40604	TO-72	20V	0.4W	21	.98	.71

PT TO 0.33W, SI N-CHANNEL DUAL-GATE PROTECTED

3N187	TO-72	20V	0.33W	18	$2.72	$1.98
3N200	TO-72	20V	0.33W	12.5	4.37	3.18
40673	TO-72	20V	0.33W	18	1.01	.73
40819	TO-72	20V	0.33W	18	1.73	1.26
40820	TO-72	20V	0.33W	17	.94	.68
40821	TO-72	20V	0.33W	11	.89	.65
40822	TO-72	20V	0.33W	24	.86	.62
40823	TO-72	20V	0.33W	18	.81	.59

SILICON POWER TRANSISTORS

0.3MHz to 3MHz (f_T) P_T to 25 W NPN

Cat. No.	Pkg. Type	V_{CEO} Max.	P_T Max.	I_C Max.	Net 1-99	100-999
31-2N1479	TO-5	40	5	1.5	$1.12	$0.82
31-2N1480	TO-5	55	5	1.5	1.30	.95
31-2N1481	TO-5	40	5	1.5	1.30	.95
31-2N1482	TO-5	55	5	1.5	1.47	1.07
31-2N1700	TO-5	40	5	1	1.90	1.38
31-40367	TO-5	55	5	1.5	7.84	5.70
31-40372	TO-66†	55	5.8	4	.99	.72
31-40373	TO-66†	140	5.8	3	1.65	1.20
31-40910	TO-66†	40	5.8	3	.83	.60
31-40911	TO-66†	80	5.8	4	1.09	.79
31-40912	TO-66†	120	5.8	3	1.29	.95
31-40913	TO-66†	150	5.8	3	1.87	1.37
31-40347	TO-5	40	8.75	1.5	.75	.54
31-40348	TO-5	65	8.75	1.5	1.06	.77
31-40349	TO-5	140	8.75	1.5	1.56	1.13
31-2N5784	TO-5	65	10	3.5	1.24	.90
31-2N5785	TO-5	50	10	3.5	1.08	.78
31-2N5786	TO-5	40	10	3.5	.99	.72
31-40610	TO-5	25	10	3	.83	.60
31-40615	TO-5	30	10	3	.86	.63
31-40620	TO-5	32	10	3	.91	.67
31-2N6263	TO-66	120	20	3	1.24	.90
31-2N1483	TO-8	40	25	3	1.73	1.26
31-2N1484	TO-8	55	25	3	1.91	1.39
31-2N1485	TO-8	30	10	3	1.91	1.39
31-2N1486	TO-8	55	25	3	2.08	1.51
31-2N1701	TO-8	40	25	2.5	2.31	1.68
31-2N3054	TO-66	55	25	4	.94	.69
31-2N3441	TO-66	140	25	3	1.56	1.13
31-40368	TO-8	55	25	3	11.60	9.60
31-2N6260	TO-66	40	29	3	.78	.56
31-40250	TO-66	40	29	3	.94	.69
31-40310	TO-66	35	29	4	.91	.66
31-40312	TO-66	60	29	4	.93	.67
31-40316	TO-66	40	29	4	.99	.72
31-40324	TO-66	35	29	4	.91	.66
31-2N5293	TO-220AA	40	36	4	.81	.59
31-2N5294	TO-220AB	70	36	4	.81	.59
31-2N5295	TO-220AA	70	36	4	.81	.59
31-2N5296	TO-220AB	40	36	4	.81	.59
31-2N5297	TO220AA	60	36	4	.86	.62
31-2N5298	TO-220AB	60	36	4	.86	.62

POWER TRANSISTORS CONTINUED ON NEXT PAGE

WHAT DO YOU NEED?

THIS INDUSTRIAL ELECTRONIC COMPONENTS PUBLICATION WILL HELP YOU FIND IT!

RCA SEMICONDUCTORS

SILICON POWER TRANSISTORS CONTINUED

Cat. No.	Pkg. Type	V_{CEO} Max.	P_T Max.	I_C Max.	Net 1-99	100-999
31-40613	TO-220AA	25	36	4	$0.70	$0.51
31-40618	TO-220AA	30	36	4	.71	.52
31-40621	TO-220AA	32	36	4	.79	.58
31-40622	TO-220AA	40	36	4	.81	.59
31-40629	TO-220AA	35	36	4	.74	.54
31-40630	TO-220AA	40	36	4	.86	.62
31-40631	TO-220AA	45	36	4	.97	.71
31-2N6077	TO-66	300	45	7	2.64	1.92
31-2N6078	TO-66	275	45	7	2.47	1.80
31-2N6079	TO-66	375	45	7	2.96	2.16
31-40851	TO-66	375	45	7	3.00	2.18
31-2N5490	TO-220AB	40	50	7	.96	.70
31-2N5491	TO-220AA	40	50	7	.96	.70
31-2N5492	TO-220AB	55	50	7	.96	.70
31-2N5493	TO-220AA	55	50	7	.96	.70
31-2N5494	TO-220AB	40	50	7	.96	.70
31-2N5495	TO-220AA	40	50	7	.96	.70
31-2N5496	TO-220AB	70	50	7	1.04	.76
31-2N5497	TO-220AA	70	50	7	1.04	.76
31-2N6261	TO-66	80	50	4	1.04	.76
31-2N6264	TO-66	150	50	3	1.82	1.32
31-40624	TO-220AA	45	50	6	.93	.67
31-40627	TO-220AA	55	50	6	.99	.72
31-40632	TO-220AA	60 ●	50	6	1.24	.90
31-40816	TO-220AA	45 ●	50	4	.91	.66
31-2N1487	TO-3	40	75	6	2.16	1.58
31-2N1488	TO-3	55	75	6	2.26	1.64
31-2N1489	TO-3	40	75	6	2.26	1.64
31-2N1490	TO-3	55	75	6	2.86	2.08
31-2N1702	TO-3	40	75	5	4.54	3.30
31-2N6098	TO-220AA	60	75	10	1.07	.78
31-2N6099	TO-220AA	60	75	10	1.07	.78
31-2N6100	TO-220AA	70	75	10	1.15	.84
31-2N6101	TO-220AB	70	75	10	1.15	.84
31-2N6102	TO-220AA	40	75	16	1.24	.90
31-2N6103	TO-220AB	40	75	16	1.24	.90
31-40369	TO-3	55	75	6	13.05	10.80
31-2N4347	TO-3	120	100	5	2.16	1.58
31-40854	TO-3	300	110	15	9.80	7.15
31-2N3055	TO-3	60	115	15	1.42	1.05
31-2N6253	TO-3	45	115	15	.99	.72
31-40363	TO-3	70●	115	15	1.49	1.08
31-40636	TO-3	95●	115	15	1.65	1.20
31-2N3442	TO-3	140	117	10	3.03	2.21
31-40251	TO-3	40	117	15	1.49	1.08
31-40325	TO-3	35	117	15	1.57	1.14
31-2N4348	TO-3	120	120	10	3.14	2.28
31-2N2015	TO-36	50	150	10	9.08	6.60
31-2N2016	TO-36	65	150	10	9.90	7.20
31-2N2338	TO-36	40	150	7.5	6.60	4.80
31-2N3771	TO-3	40	150	30	3.14	2.28
31-2N3772	TO-3	60	150	20	3.14	2.28
31-2N3773	TO-3	140	150	16	4.79	3.48
31-2N6254	TO-3	80	150	15	1.57	1.14
31-2N6257	TO-3	40	150	20	2.48	1.80
31-2N6262	TO-3	150	150	10	3.22	2.34
31-40411	TO-3	90●	150	30	3.30	2.40
31-2N6258	TO-3	80	250	30	3.71	2.70
31-2N6259	TO-3	150	250	16	5.53	4.02
31-2N5575	TO-3■	50	300	80	27.41	22.68
31-2N5576	TO-3■	50	300	80	27.41	22.68
31-2N5577	TO-3■	50	300	80	30.45	25.20
31-2N5578	TO-3■	70	300	80	30.45	25.20
31-2N5579	TO-3■	70	300	60	30.45	25.20
31-2N5580	TO-3■	70	300	60	33.50	27.72

3 MHz to 30 MHz (f_T) PNP

Cat. No.	Pkg. Type	V_{CEO} Max.	P_T Max.	I_C Max.	Net 1-99	100-999
31-2N5415	TO-5	-200	10	-1	1.24	.90
31-2N5516	TO-5	-300	10	-1	1.62	1.18
31-2N5781	TO-5	-65	10	-3.5	1.08	1.02
31-2N5782	TO-5	-50	10	-3.5	1.24	.90
31-2N5783	TO-5	-40	10	-3.5	1.16	.84
31-40609	TO-5	-25	10	-3	1.19	.87
31-40614	TO-5	-30	10	-3	1.24	.90
31-40619	TO-5	-32	10	-3	1.29	.94
31-2N6211	TO-66	-225	20	-2	3.71	2.70
31-2N6212	TO-66	-300	20	-2	4.54	3.30
31-2N6213	TO-66	-350	20	-2	6.52	4.74
31-2N6106	TO-220AA	-70	40	-7	.89	.65
31-2N6107	TO-220AB	-70	40	-7	.89	.65
31-2N6108	TO-220AA	-50	40	-7	.89	.65
31-2N6109	TO-220AB	-50	40	-7	.89	.65
31-2N6110	TO-220AA	-30	40	-7	.86	.63
31-2N6111	TO-220AB	-30	40	-7	.86	.63
31-2N5954	TO-66	-75	40	-6	1.56	1.14
31-2N5955	TO-66	-60	40	-6	1.40	1.02

CONTINUED IN NEXT COLUMN

3 MHz to 30 MHz (f_T) PNP CONTINUED

Cat. No.	Pkg Style	V_{CEO} Max.	P_T Max.	I_C Max.	Net 1-99	100-999
31-2N5956	TO-66	-40	40	-6	$1.23	$0.90
31-40872	TO-220AB	-100	40	-7	.94	.68
31-40874	TO-220AB	-70	40	-7	.89	.75
31-40876	TO-220AB	-50	40	-7	.92	.67
31-40817	TO-220AB	-45●	40	-7	1.15	.84
31-45193	TO-220AB	-40	40	-7	1.38	1.02
31-45194	TO-220AB	-60	40	-7	1.62	1.20
31-45195	TO-220AB	-80	40	-7	1.99	1.47
31-40878	TO-220AB	-65	75	-10	.89	.64
31-40880	TO-220AB	-85	75	-10	.89	.64
31-40882	TO-220AB	-40	75	-10	.89	.64
31-2N6246	TO-3	-60	125	-15	1.98	1.44
31-2N6247	TO-3	-80	125	-15	2.31	1.68
31-2N6248	TO-3	-100	125	-15	2.64	1.92

3 MHz to 30 MHz (f_T) NPN

Cat. No.	Pkg Style	V_{CEO} Max.	P_T Max.	I_C Max.	Net 1-99	100-999
31-40885	Plas TO-5▲	300	1.4	1	$0.89	$0.64
31-40886	Plas TO-5▲	350	1.4	1	1.00	.73
31-40387	Plas TO-5▲	400	1.4	1	1.06	.77
31-40390	TO-5†	250	3.5	1	1.06	.77
31-40321	TO-5	300●	5	0.5	.86	.63
31-40327	TO-5	300●	5	0.5	.87	.64
31-40374	TO-66†	175	5.8	2	1.57	1.14
31-2N3439	TO-5	350	10	1	1.19	.86
31-2N3440	TO-5	250	10	1	.89	.65
31-2N4063♠	TO-5	350	10	1	1.35	.98
31-2N4064♠	TO-5	250	10	1	1.06	.77
31-40346	TO-5	175●	10	1	.64	.47
31-40385	TO-5	350	10	1	5.36	3.90
31-40412	TO-5	250	10	1	1.06	.77
31-2N6175	Plas TO-5	300	20	1	.81	.59
31-2N6176	Plas TO-5	350	20	1	.93	.67
31-2N6177	Plas TO-5	400	20	1	1.11	.81
31-2N3583	TO-66	175	35	2	1.32	.96
31-2N3584	TO-66	250	35	2	1.90	1.38
31-2N3585	TO-66	300	35	2	2.31	1.68
31-2N4240	TO-66	300	35	2	2.06	1.50
31-40313	TO-66	300	35	2	1.55	1.13
31-40318	TO-66	300	35	2	1.55	1.13
31-40322	TO-66	300	35	2	1.57	1.14
31-40328	TO-66	300	35	2	1.58	1.15
31-40850	TO-66	300	35	2	2.48	1.80
31-2N6288	TO-220AB	30	40	7	.78	.56
31-2N6289	TO-220AA	30	40	7	.78	.56
31-2N6290	TO-220AB	50	40	7	.81	.59
31-2N6291	TO-220AA	50	40	7	.81	.59
31-2N6292	TO-220AB	70	40	7	.81	.59
31-2N6293	TO-220AA	70	40	7	.81	.59
31-40871	TO-220AB	100	40	7	.85	.62
31-40873	TO-220AB	70	40	7	.83	.60
31-40875	TO-220AB	50	40	7	.83	.60
31-45190	TO-220AB	40	40	7	1.23	.91
31-45191	TO-220AB	60	40	7	1.47	1.09
31-45192	TO-220AB	80	40	7	1.77	1.32
31-40877	TO-220A	65	75	10	.92	.67
31-40879	TO-220A	85	75	10	.92	.67
31-40881	TO-220A	40	75	10	.92	.67
31-2N3263	Rad.	90	84	25	46.40	38.40
31-2N3264	Rad.	60	84	25	40.60	33.60
31-2N5239	TO-3	225	100	5	2.97	2.16
31-2N5240	TO-3	300	100	5	3.47	2.52
31-2N5838	TO-3	250	100	5	2.72	1.98
31-2N5839	TO-3	275	100	5	2.89	2.10
31-2N5840	TO-3	300	100	5	3.22	2.34
31-40852	TO-3	350	100	7	3.25	2.36
31-2N5804	TO-3	225	110	8	4.54	3.30
31-2N5805	TO-3	300	110	8	5.95	4.32
31-40853	TO-3	300	110	10	6.44	4.68
31-2N3265	TO-63	90	125	25	47.15	39.00
31-2N3266	TO-63	60	125	25	40.45	33.50
31-2N6249	TO-3	200	175	10	8.25	6.00
31-2N6250	TO-3	275	175	10	9.15	6.67
31-2N6251	TO-3	350	175	10	9.80	7.15

30 MHz to MHz (f_T) PNP

Cat. No.	Pkg Style	V_{CEO} Max.	P_T Max.	I_C Max.	Net 1-99	100-999
31-40406	TO-5	-50	1	-0.7	$0.76	$0.55
31-40410	TO-5†	-90●	3	-0.7	.89	.65
31-40391	TO-5†	-40	3.5	-1	.81	.59
31-40319	TO-5	-40	5	-0.7	.71	.52
31-40362	TO-5	-70●	5	-0.7	.76	.55
31-40537	TO-5	-55●	5	-0.7	.69	.50
31-40538	TO-5	-55●	5	-0.7	.62	.45
31-40634	TO-5	-75●	5	-0.7	.84	.61

†With factory attached heat radiator. ●V_{CER} value. ■Modified.
♠With factory attached flange. *Units are in μA.

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RCA SEMICONDUCTORS

SILICON POWER TRANSISTORS CONTINUED

30 MHz to 300 MHz (f_T) PNP

Cat. No.	Pkg. Type	V_{CEO} Max.	P_T Max.	I_C Max.	Net 1-99	100-999
31-2N4036	TO-5	-65	7	-1	$0.89	$0.65
31-2N4037	TO-5	-40	7	-1	.73	.53
31-2N4314	TO-5	-65	7	-1	.81	.59
31-40394	TO-5†	-40	7	-1	.81	.59
31-40815	TO-5	-40	7	-1	.82	.62
31-2N5322	TO-5	075	10	-2	1.47	1.07
31-2N5323	TO-5	-50	10	-2-	1.06	.77
31-40595	TO-5	-95	10	-2	1.51	1.09
31-2N6180	TO-5	-75	25	-2	1.24	.90
31-2N6181	TO-5	-50	25	-2	.87	.64

30 MHz to 300 MHz (f_T) NPN

31-40407	TO-5	50	1	0.7	.58	.42
31-40408	TO-5	90	1	0.7	.84	.61
31-2N718A	TO-18	32	1.8	1	1.08	.78
31-2N720A	TO-18	80	1.8	1	1.32	.96
31-2N2895	TO-18	65	1.8	1	1.44	1.02
31-2N2896	TO-18	90	1.8	1	2.06	1.50
31-2N2897	TO-18	45	1.8	1	1.16	.84
31-40084	TO-18	40	1.8	1	2.26	1.64
31-2N697	TO-5	40●	2	0.5	.41	.30
31-2N699	TO-5	80●	2	0.5	.91	.66
31-2N1613	TO-5	50●	3	1	.50	.36
31-2N1711	TO-5	50●	3	1	.68	.49
31-2N1893	TO-5	80	3	0.5	.81	.59
31-40409	TO-5†	90●	3	0.7	.87	.64
31-40389	TO-5†	40	3.5	0.7	.64	.47
31-40625	TO-5†	45	3.5	1	.74	.54
31-40628	TO-5†	55	3.5	1	.76	.55
31-2N2102	TO-5	65	5	1	1.07	.78
31-2N2270	TO-5	45	5	1	.59	.43
31-2N2405	TO-5	90	5	1	1.57	1.14
31-2N3053	TO-5	40	5	0.7	.48	.33
31-2N5189	TO-39	35	5	2	.76	.56
31-2N5262	TO-39	50	5	2	1.62	1.18
31-40309	TO-5	18	5	0.7	.58	.42
31-40311	TO-5	30	5	0.7	.59	.43
31-40314	TO-5	40	5	0.7	.61	.44
31-40315	TO-5	35	5	0.7	.59	.43
31-40317	TO-5	40	5	0.7	.61	.44
31-40320	TO-5	40	5	0.7	.61	.44
31-40323	TO-5	18	5	0.7	.58	.42
31-40326	TO-5	40	5	0.7	.61	.44
31-40360	TO-5	70	5	0.7	.79	.58
31-40361	TO-5	70●	5	0.7	.83	.60
31-40366	TO-5	65	5	1	5.36	3.90
31-40539	TO-5	55●	5	0.7	.56	.40
31-40635	TO-5	75●	5	0.7	.63	.46
31-40611	TO-5	25	5	0.7	.54	.39
31-40616	TO-5	32	5	0.7	.56	.41
31-40814	TO-5	32	5	0.7	.69	.50
31-40375	TO-66†	50	5.8	7	1.91	1.39
31-40392	TO-5♠	40	7	0.7	.74	.54
31-40544	TO-5♠	50●	7	0.7	.58	.42

31-2N3262	TO-5	80	8.7	1.5	$7.43	$5.40
31-2N5320	TO-5	75	10	2	1.20	.87
31-2N5321	TO-5	50	10	2	.96	.69
31-40594	TO-5	95●	10	2	1.30	.94
31-2N6178	Plas TO-5	75	10	2	.98	.71
31-2N6179	Plas TO-5	50	25	2	.74	.54
31-2N3878	TO-66	50	35	7	1.65	1.20
31-2N3879	TO-66	75	35	7	2.60	1.89
31-2N5202	TO-66	75●	35	4	2.00	1.45
31-40364	TO-66	60●	35	7	1.82	1.32
31-2N5038	TO-3	90	140	20	5.78	4.20
31-2N5039	TO-3	75	140	20	4.87	3.54
31-2N5671	TO-3	90	140	30	16.59	13.76
31-2N5672	TO-3	120	140	30	22.68	18.80
31-2N6032	TO-3■	90	140	50	34.65	28.70
31-2N6033	TO-3■	120	140	40	46.40	38.40
31-2N6354	TO-3	120	140	10	4.13	3.00

RF POWER TRANSISTORS-SILICON NPN

SINGLE–SIDEBAND APPLICATIONS (2-30 MHz) AND MILITARY COMMUNICATIONS (30-76 MHz)

Cat. No.	Pkg. Type	Freq. MHz	Output Watts	V_{CC} V.	Gain dB	Net 1-99	100-999
31-40082	TO-39	30	2.5(PEP)	12.5	10	$4.04	$2.94
31-2N5992	TO-216AA	30	15(PEP)	12.5	10	8.25	6.00
31-40936	TO-60	30	20(PEP)	28	13	13.00	10.80
31-2N5070	TO-60	30	25(PEP)	28	13	29.00	24.00
31-2N6093	TO-217AA	30	75(PEP)	28	13	80.00	66.00
31-2N3118	TO-5	50	1	28	. . .	4.95	3.60
31-2N3119	TO-5	50	1	28	. . .	5.36	3.90

CONTINUED IN NEXT COLUMN

RF POWER TRANSISTORS CONT'D

Cat. No.	Pkg. Type	Freq. MHz	Output Watts	V_{CC} V.	Gain dB	Net 1-99	100-999
31-2N2631	TO-39	50	7.5	28	. . .	3.80	2.76
31-2N2876	TO-60	50	10	28	. . .	11.25	9.30
31-2N3229	TO-60	50	15	50	. . .	22.21	18.38
31-2N1491	TO-5	70	0.01	20	13	1.82	1.32
31-2N1492	TO-5	70	0.1	30	13	4.29	3.12
31-2N1493	TO-5	70	0.5	50	10	7.01	5.10
31-2N5071	TO-60	76	24	24	9	29.00	24.00
31-2N3553	TO-39	175	2.5	28	. . .	1.32	.96
31-2N3632	TO-60	175	13.5	28	. . .	11.50	9.50
31-40665	TO-60	175	13.5	28	. . .	14.00	11.65
31-2N5090	TO-60	400	1.2	28	7.8	11.40	8.30
31-2N3375	TO-60	400	2.5	28	. . .	9.90	7.20
31-40666	TO-60	400	3	28	. . .	12.00	9.85
31-2N4440	TO-60	400	5	28	. . .	10.30	8.50
31-2N3733	TO-60	400	10	28	. . .	12.70	10.50
31-2N4012	TO-60	1000	2.5*	28	4*	14.20	11.75

*As tripler

CITIZENS BAND (27 MHz)

31-40080	TO-5	27	0.1	12	. . .	$1.08	$0.78
31-40081	TO-5	27	0.4	12	. . .	1.41	1.02
31-40082	TO-39	27	3	12	. . .	4.04	2.94
31-40446	TO-39♠	27	3	12	. . .	4.29	3.12
31-40581	TO-39	27	3.5	12	. . .	4.87	3.54
31-40582	TO-39♠	27	3.5	12	. . .	5.12	3.72

MOBILE–RADIO (40-88 MHz)

31-2N5992	TO-216AA	88	7	12.5	10	$8.25	$6.00
31-2N4932	TO-60	88	12	13.5	5.3	29.00	24.00
31-2N5993	TO-216AA	88	18	12.5	10	11.60	9.60
31-2N4933	TO-60	88	20	24	7.5	29.00	24.00
31-40340	TO-60	50	25	13.5	7	29.00	24.00
31-40341	TO-60	50	30	24	10	29.00	24.00

MOBILE–RADIO (148-175) MHz

31-2N4427	TO-39	175	1	12	10	$1.78	$1.30
31-40280	TO-39	175	1	13.5	9	4.62	3.36
31-2N5913	TO-39	175	1.75	12.5	12.4	3.63	2.64
31-40281	TO-60	175	4	13.5	6	10.60	8.75
31-2N5995	TO-216AA	175	7	12.5	9.7	8.25	6.00
31-40282	TO-60	175	12	13.5	4.8	11.90	9.85
31-2N5996	TO-216AA	175	15	12.5	4.5	11.60	9.60

MOBILE–RADIO (450-470 MHz)

31-40964	TO-39	470	0.4	12	6	$2.15	$1.56
31-40965	TO-39	470	0.5	12	7	1.70	1.30
31-2N5914	TO-216AA	470	2	12.5	7	9.90	7.20
31-40934	HF-31	470	2	12.5	7	9.90	7.20
31-2N5915	TO-216AA	470	6	12.5	4.8	10.88	9.00
31-40935	HF-31	470	6	12.5	4.8	9.90	7.20
31-40893	HF-36	470	15	12.5	5.2	17.40	14.40

AIRCRAFT–RADIO (108-156 MHz)

31-2N5994	TO-216AA	118	15	12.5	7	18.15	15.00
31-40290	TO-39	136	2	12.5	6	2.48	1.80
31-40291	TO-60	136	2	12.5	6	10.40	7.55
31-40292	TO-60	136	6	12.5	4.8	11.30	9.35
31-2N5102	TO-60	136	15	24	4	21.75	18.00

MARINE–RADIO (108-156 MHz)

31-40953	TO-39	156	2	12.5	13	$3.30	$2.40
31-40954	HF-44	156	10	12.5	7	8.25	6.00
31-40955	HF-44	156	25	12.5	4.5	14.50	12.00

UHF MILITARY (225-400 MHz)

31-2N3866	TO-39	400	1	28	10	$1.58	$1.15
31-40941	HF-31	400	1	28	10	11.40	8.30
31-2N5916	TO-216AA	400	2	28	10	12.33	10.20
31-2N5917	HF-31	400	2	28	10	11.60	9.60
31-40940	TO-216AA	400	5	28	5.2	11.55	8.40
31-2N5918	TO-216AA	400	10	28	8	17.40	14.40
31-2N5016	TO-60	400	15	28	5	29.00	24.00
31-2N5919	TO-216AA	400	16	28	6	21.75	18.00
31-2N5919A	TO-216AA	400	16	28	6	23.20	19.20
31-2N6104	HF-32	400	30	28	5	47.85	39.60
31-2N6105	TO-216AA	400	30	28	5	47.85	36.60

MICROWAVE

Cat. No.	Pkg. Type	Freq. GHz	Power Watts	V_{CC} V.	Gain dB	%Efficiency	Net 1-99	100-999
31-40836	TO-215AA	2	0.5	21	. .	20	$50.00	$43.00
31-2N5470	TO-215AA	2	1	28	5	30	50.00	43.00
31-40837	TO-215AA	2	1.25	28	. .	20	75.00	64.50
31-2N5920	TO-215AA	2	2	28	10	40	75.00	64.50

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RCA SEMICONDUCTORS

RF TRANSISTORS CONTINUED

MICROWAVE CONTINUED

Cat. No.	Pkg. Type	Freq. GHz	Power Watts	V_{CC} V.	Gain dB	% Efficiency	Net 1-99	100-999
31-2N6265	HF-28	2	2	28	8.2	33	75.00	64.50
31-40909	TO-201AA	2	2	25	. .	20	134.00	115.00
31-2N5921	TO-201AA	2	5	28	7	40	100.00	86.00
31-2N6266	HF-28	2	5	28	7	33	110.00	93.00
31-2N6267	HF-28	2	10	28	7	35	120.00	104.00
31-2N6268	HF-28	2.3	2	22	7	33	75.00	64.50
31-40898	TO-215AA	2.3	2	22	7	35	75.00	64.50
31-40899	TO-201AA	2.3	6	22	6	35	134.00	115.00
31-2N6269	HF-28	2.3	6.5	22	5	32	150.00	130.00

HIGH-SPEED SWITCHING

Cat. No.	Pkg. Type	Switching (ns) t_{on}	t_{off}	V_{CC} V.	f_T MHz	Net 1-99	100-999
31-2N3119	TO-5	40	700	28	250	$5.36	$3.90
31-2N3262	TO-39	40	750	28	150	7.43	5.40

RF SMALL-SIGNAL TRANSISTORS-SILICON N-P-N

SMALL–SIGNAL, LOW–NOISE, AND CATV/MATV

Cat. No.	Pkg. Type	Freq. MHz	Noise dB	V_{CE} V.	Gain dB	Net 1-99	100-999
31-2N918	TO-72	60	6	6	13	$1.15	$0.84
31-2N3478	TO-72	200	4.5	6	12	1.48	1.08
31-2N3600	TO-72	200	4.5	15	17	2.14	1.56
31-2N5109	TO-39	200	3	15	11	2.80	2.05
31-2N5179	TO-72	200	4.5	6	15	.81	.59
31-40608	TO-39	200	3	15	11	2.48	1.80
31-40894	TO-72	200	3	12	15	.79	.88
31-40895	TO-72	200	. .	12	15	.69	.50
31-40896	TO-72	200	. .	12	15	.56	.41
31-40897	TO-72	200	. .	12	18	.58	.42
31-2N2857	TO-72	450	4.5	6	12.5	2.72	1.98
31-2N3839	TO-72	450	3.9	6	12.5	9.90	7.20
31-40915	TO-72	450	2.5	10	11	3.20	2.35

HIGH-RELIABILITY RF POWER TRANSISTORS

Cat. No.	Pkg. Type	High Reliability Version of	Net 1-99	100-999
31-40279	TO-60	2N3375	$109.85	$90.90
31-40294	TO-72	2N2857	23.05	19.10
31-40305	TO-39	2N3553	15.10	12.50
31-40306	TO-60	2N3375	26.85	22.20
31-40307	TO-60	2N3632	28.85	23.90
31-40577	TO-5	2N3118	58.00	48.00
31-40578	TO-39	2N3866	58.00	48.00
31-40605	TO-39	2N3553	45.00	37.25

THYRISTORS—SILICON TRIACS

LOW VOLTAGE OPERATION 50 & 60 Hz
VDROM=100V

Cat. 31-*	Pkg. Type	IT(rms) A.	@TC °C.	IGT Max. 1+,111-	1-,111+	Net 1-99	100-999
40531	TO-5†	1.6	25	3mA	3mA	$1.73	$1.26
40767	TO-5†	1.6	25	4mA	4mA	1.54	1.12
40534	TO-5†	1.9	25	10mA	10mA	1.46	1.06
40684	TO-5†	1.9	25	25mA	40mA	1.35	.99
2N5754	TO-5	2.5	70	25mA	40mA	1.19	.82
40525	TO-5	2.5	60	3mA	3mA	1.57	1.14
40528	TO-5	2.5	70	10mA	10mA	1.29	.94
40693	TO-5†	2.5	70	45mA	45mA	1.57	1.14
40696	TO-5	2.5	70	45mA	45mA	1.41	1.02
40766	TO-5	2.5	60	4mA	4mA	1.37	1.00

†Factory attached heat radiator.

120-V LINE OPERATION 50 &60HZ–VDROM=200V

40532	TO-5†	1.6	25	3mA	3mA	$1.94	$1.41
40761	TO-5†	1.6	25	4mA	4mA	1.74	1.26
40535	TO-5†	1.9	25	10mA	10mA	1.65	1.20
40685	TO-5†	1.9	25	25mA	40mA	1.57	1.14
40509	TO-5†	2.2	25	25mA	40mA	1.65	1.20
40511	TO-5†	2.3	Integral Trigger			2.56	1.86
40731	TO-5†	2.3	75	45mA	45mA	1.73	1.26
2N5755	TO-5	2.5	70	25mA	40mA	1.41	1.02
40526	TO-5	2.5	60	3mA	3mA	1.78	1.30
40529	TO-5	2.5	70	10mA	10mA	1.49	1.08
40691	TO-5	2.5	60	4mA	4mA	1.57	1.14
40694	TO-5†	2.5	70	45mA	45mA	1.64	1.19
40697	TO-5	2.5	70	45mA	45mA	1.47	1.07
40502	TO-66	3.3	25	25mA	40mA	1.74	1.26
40733	TO-5†*	4.2	75	45mA	45mA	1.65	1.20
40429	TO-66	6	75	25mA	40mA	1.57	1.14

CONTINUED IN NEXT COLUMN

THYRISTORS—SILICON TRIACS CONT'D

Cat. 31-*	Pkg. Type	IT(rms) A.	@TC °C.	IGT Max. 1+,111-	1-,111+	Net 1-99	100-999
40485	TO-5	6	75	25mA	40mA	1.49	1.08
40638	TO-5†	6	60	25mA	40mA	1.57	1.14
40725	TO-5	6	75	45mA	45mA	1.57	1.14
40727	TO-66	6	75	45mA	45mA	2.06	1.50
40729	TO-66†	6	75	45mA	45mA	2.23	1.62
40668	Versa.	8	80	25mA	60mA	1.45	1.06
40721	Versa.	8	80	45mA	45mA	1.62	1.18
2N5567	PF	10	85	25mA	40mA	3.05	2.22
2N5569	Stud	10	85	25mA	40mA	3.38	2.46
40717	PF	10	85	45mA	45mA	3.22	2.34
40719	Stud	10	85	45mA	45mA	3.55	2.58
40799	ISO-S	10	85	25mA	40mA	4.54	3.30
2N5571	PF	15	80	50mA	80mA	3.25	2.36
2N5573	Stud	15	80	50mA	80mA	3.58	2.60
40575	TO-66	15	70	30mA	80mA	2.01	1.50
40711	PF	15	80	45mA	45mA	3.42	2.48
40713	Stud	15	80	45mA	45mA	3.15	2.72
40715	TO-66	15	70	45mA	45mA	2.48	1.80
40802	ISO-S	15	75	50mA	80mA	4.74	3.44
40660	PF	30	65	50mA	80mA	4.52	3.29
40662	Stud	30	60	50mA	80mA	4.85	3.53
40705	PF	30	65	45mA	45mA	4.69	3.41
40707	Stud	30	60	45mA	45mA	5.02	3.65
40805	ISO-S	30	55	50mA	80mA	6.00	4.37
2N5441	PF	40	70	50mA	80mA	5.64	4.10
2N5444	Stud	40	65	50mA	80mA	5.97	4.34
40688	ISO-S	40	60	50mA	80mA	7.13	5.18
40699	PF	40	70	45mA	45mA	5.81	4.22
40702	Stud	40	65	45mA	45mA	6.14	4.46

240-V LINE OPERATION 50 & 60HZ–VDROM = 400V

40533	TO-5†	1.6	25	3mA	3mA	$2.65	$1.92
40762	TO-5†	1.6	25	4mA	4mA	2.05	1.49
40536	TO-5†	1.9	25	10mA	10mA	1.95	1.42
40686	TO-5†	1.9	25	25mA	40mA	1.85	1.35
40510	TO-5†	2.2	25	25mA	40mA	1.95	1.42
40512	TO-5†	2.2	25	Integral Trigger		3.21	2.33
40732	TO-5†	2.3	75	45mA	45mA	2.23	1.62
2N5756	TO-5	2.5	70	25mA	40mA	1.69	1.23
40527	TO-5	2.5	60	3mA	3mA	2.48	1.80
40530	TO-5	2.5	70	10mA	10mA	1.79	1.30
40692	TO-5	2.5	60	4mA	4mA	1.89	1.37
40695	TO-5†	2.5	70	45mA	45mA	2.01	1.46
40698	TO-5	2.5	70	45mA	45mA	1.85	1.34
40503	TO-66	3.3	25	25mA	40mA	2.05	1.48
40734	TO-5+*	4.2	75	45mA	45mA	2.15	1.56
40430	TO-66	6	75	25mA	40mA	1.89	1.37
40432	TO-5	6	75	Integral Trigger		2.88	2.09
40486	TO-5	6	75	25mA	40mA	1.79	1.30
40639	TO-5†	6	60	25mA	40mA	1.87	1.36
40664	TO-5	6	75	50mA	----	1.57	1.14
40667	TO-5	6	75	50mA	----	1.65	1.20
40723	TO-5	6	75	45mA	45mA	1.95	1.42
40724	TO-5†	6	75	45mA	45mA	$2.05	$1.49
40726	TO-5	6	75	45mA	45mA	2.06	1.50
40728	TO-66	6	75	45mA	45mA	2.39	1.74
40730	TO-66†	6	75	45mA	45mA	2.56	1.86
40669	Versa.	8	80	25mA	60mA	1.72	1.25
40722	Versa.	8	80	45mA	45mA	2.18	1.58
2N5568	PF	10	85	25mA	40mA	3.66	2.66
2N5570	Stud	10	85	25mA	40mA	3.99	2.90
40718	PF	10	85	45mA	45mA	3.83	2.78
40720	Stud	10	85	45mA	45mA	4.16	3.02
40800	ISO-S	10	85	25mA	40mA	5.15	3.74
2N5572	PF	15	80	50mA	80mA	3.89	2.83
2N5574	Stud	15	80	50mA	80mA	4.22	3.07
40576	TO-66	15	70	30mA	80mA	2.48	1.80
40712	PF	15	80	45mA	45mA	4.06	2.95
40714	Stud	15	80	45mA	45mA	4.39	3.19
40716	TO-66	15	70	45mA	45mA	3.27	2.38
40803	ISO-S	15	75	50mA	80mA	5.38	3.91
40661	PF	30	65	50mA	80mA	5.41	3.94
40663	Stud	30	60	50mA	80mA	5.74	4.18
40706	PF	30	65	45mA	45mA	5.58	4.06
40708	Stud	30	60	45mA	45mA	5.91	4.30
40806	ISO-S	30	55	50mA	80mA	6.90	5.02
2N5442	PF	40	70	50mA	80mA	6.77	4.92
2N5445	Stud	40	65	50mA	80mA	7.10	5.16
40689	ISO-S	40	60	50mA	80mA	8.25	6.00
40700	PF	40	70	45mA	45mA	6.93	5.04
40703	Stud	40	65	45mA	45mA	7.26	5.28

HIGH VOLTAGE OPERATION 50 & 60HZ
VDROM = 600V

40687	TO-5†	1.9	25	25mA	40mA	$2.28	$1.66
2N5757	TO-5	2.5	70	25mA	40mA	2.12	1.54
40795	PF	10	85	25mA	40mA	4.59	3.34
40796	Stud	10	85	25mA	40mA	4.92	3.58

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RCA SEMICONDUCTORS

HIGH VOLTAGE OPERATION 50 & 60 Hz VDROM=250V to 600V

Cat. 31-★	Pkg. Type	IT(rms) A	@TC °C	IGT mA	VGT V.	Net 1-99	100- 999
40801	ISO-S	10	85	25mA	40mA	6.07	4.42
40797	PF	15	80	50mA	80mA	4.87	3.54
40798	Stud	15	80	50mA	80mA	5.20	3.78
40804	ISO-S	15	75	50mA	80mA	6.35	4.62
40671	PF	30	65	50mA	80mA	6.77	4.92
40672	Stud	30	60	50mA	80mA	7.10	5.16
40709	PF	30	65	45mA	45mA	6.93	5.04
40710	Stud	30	60	45mA	45mA	7.26	5.28
40807	ISO-S	30	55	50mA	80mA	8.25	6.00
2N5443	PF	40	70	50mA	80mA	8.46	6.16
2N5446	Stud	40	65	50mA	80mA	8.79	6.40
40690	ISO-S	40	60	50mA	80mA	9.95	7.24
40701	PF	40	70	45mA	45mA	8.63	6.28
40704	Stud	40	65	45mA	45mA	8.96	6.52
40918	PF	80	75	75	150	40.00	32.45
40921	Stud	80	65	75	150	42.00	33.51
40924	ISO-S	80	55	75	150	45.00	35.98

†Factory attached heat radiator.

400 Hz SERVICE VDROM = 200V

40769	TO-5	0.5	90	10mA	10mA	$1.95	$1.42
40771	TO-5	0.5	90	25mA	40mA	1:77	1.28
40773	TO-5**	2.5	90	25mA	40mA	1.88	1.37
40775	PF	6	90	50mA	80mA	3.07	2.23
40777	Stud	6	90	50mA	80mA	3.55	2.58
40779	PF	10	85	50mA	80mA	4.74	3.44
40781	Stud	10	85	50mA	80mA	5.45	3.95
40783	PF	15	80	50mA	80mA	5.20	3.78
40785	Stud	15	80	50mA	80mA	5.95	4.32
40787	PF	25	85	80	120	8.66	6.30
40789	Stud	25	80	80	120	10.83	8.96
40791	PF	40	70	80	120	10.77	8.91
40793	Stud	40	65	80	120	11.42	9.46

400 Hz SERVICE VDROM = 400V

40770	TO-5	0.5	90	10mA	10mA	$2.77	$2.02
40772	TO-5	.5	90	25mA	40mA	2.21	1.61
40774	TO-5**	2.5	90	25mA	40mA	2.48	1.80
40776	PF	6	90	50mA	80mA	4.36	3.17
40778	Stud	6	90	50mA	80mA	4.83	3.52
40780	PF	10	85	50mA	80mA	6.15	4.48
40782	Stud	10	85	50mA	80mA	6.70	4.88
40784	PF	15	80	50mA	80mA	7.00	5.10
40786	Stud	15	80	50mA	80mA	7.70	5.60
40788	PF	25	85	80	120	9.40	6.84
40790	Stud	25	80	80	120	14.35	11.88
40792	PF	40	70	80	120	15.08	12.48
40794	Stud	40	65	80	120	15.73	13.03

**Modified.

LOW-VOLTAGE OPERATION 50 & 60 Hz V_{DROM}=25V to 150V

40942	TO-8	4.5	75	8	1.1	$2.68	$1.95
40867	TO-220AB	8	80	8	0.9	9.10	6.60
40737	PF	10	85	6	0.9	1.49	1.08
40741	Stud	10	85	6	0.9	1.82	1.32
40745	ISO-S	10	85	6	0.9	2.97	2.16
2N3668	TO-3	12.5	80	20	1.5	2.39	1.74
2N1842A	TO-48	16	80	80	3.5	2.20	1.60
2N1843A	TO-48	16	80	80	3.5	2.61	1.90
2N1844A	TO-48	16	80	80	3.5	3.30	2.40
2N1845A	TO-48	16	80	80	3.5	3.84	2.80
40749	PF	20	75	8	1.1	2.34	1.70
40753	Stud	20	75	8	1.1	2.67	1.94
40757	ISO-S	20	75	8	1.1	3.83	2.75
2N682	TO-48	25	65	50	3	2.82	2.05
2N683	TO-48	25	65	50	3	3.57	2.60
2N684	TO-48	25	65	50	3	4.19	3.05
2N3650	TO-48	35	40	80	1.5	7.80	5.25
2N3870	PF	35	65	25	1.1	3.63	2.64
2N3896	Stud	35	65	25	1.1	3.96	2.88
40680	ISO-S	35	60	25	1.1	5.12	3.72

120-V LINE OPERATION 50 & 60 Hz V_{DROM}=200V to 300V

40504	TO-66†	1.7	25	8	1.2	$1.64	$1.19
2N3528	TO-8	2	25	8	1.2	1.44	1.05
40658	TO-5†	3.3	25	6	0.65	1.57	1.14
40943	TO-8	4.5	75	8	1.1	2.80	2.04
2N3228	TO-66	5	75	8	1.2	1.47	1.07
40553	TO-66	5	60	15	1.8	2.75	2.00
40654	TO-5■	7	60	6	0.65	1.41	1.02
40656	TO-5◆	7	50	6	0.65	1.49	1.08
40868	TO-220AB	8	80	8	0.9	1.40	1.02
40738	PF	10	85	6	0.9	1.57	1.14
40742	Stud	10	85	6	0.9	1.90	1.38
40746	ISO-S	10	85	6	0.9	3.05	2.22
2N3669	TO-3	12.5	80	20	1.5	2.81	2.04
2N1846A	TO-48	16	80	80	3.5	4.46	3.75
2N1847A	TO-48	16	80	80	3.5	5.10	3.70

CONTINUED IN NEXT COLUMN

THYRISTORS & SCR's CONTINUED

Cat. 31-★	Pkg. Type	IT(rms) A.	@TC °C.	IGT Max. 1+,111-	1-,111+	Net 1-99	100- 999
2N1848A	TO-48	16	80	80	3.5	$5.51	$4.00
40750	PF	20	75	8	1.1	2.48	1.80
40754	Stud	20	75	8	1.1	2.81	2.04
40758	ISO-S	20	75	8	1.1	3.96	2.88
2N685	TO-48	25	65	50	3	4.81	3.50
2N686	TO-48	25	65	50	3	5.36	3.90
2N687	TO-48	25	65	50	3	5.77	4.20
2N3651	TO-48	35	40	80	1.5	12.00	8.04
2N3652	TO-48	35	40	80	1.5	15.00	10.05
2N3871	PF	35	65	25	1.1	4.54	3.30
2N3897	Stud	35	65	25	1.1	4.87	3.54
40681	ISO-S	35	60	25	1.1	6.02	4.38

240-V LINE OPERATION 50 & 60 Hz V_{DROM}=400V

40505	TO-66†	1.7	25	8	1.2	$1.94	$1.41
2N3529	TO-8	2	25	8	1.2	1.75	1.28
40659	TO-5†	3.3	25	6	0.65	1.85	1.35
40944	TO-8	4.5	75	8	1.1	3.36	2.45
2N3525	TO-66	5	75	8	1.2	1.77	1.29
40554	TO-66	5	60	15	1.8	4.44	3.22
40655	TO-5■	7	60	6	0.65	1.69	1.23
40657	TO-5◆	7	50	6	0.65	1.77	1.29
40869	TO-220AB	8	80	8	0.9	1.90	1.38
40739	PF	10	75	6	0.9	2.39	1.74
40743	Stud	10	85	6	0.9	2.72	1.98
40747	ISO-S	10	85	6	0.9	3.85	2.85
2N3670	TO-3	12.5	80	20	1.5	3.80	2.76
2N1849A	TO-48	16	80	80	3.5	6.54	4.75
40751	PF	20	75	8	1.1	3.75	2.72
40755	Stud	20	75	8	1.1	4.08	2.96
40759	ISO-S	20	75	8	1.1	5.23	3.80
2N688	TO-48	25	65	50	3	6.74	4.90
2N3653	TO-48	35	40	80	1.5	20.75	13.90
2N3872	PF	35	65	25	1.1	5.94	4.32
2N3898	Stud	35	65	25	1.1	6.27	4.56
40682	ISO-S	35	60	25	1.1	7.43	5.40

HIGH-VOLTAGE OPERATION 50&60Hz V_{DROM}=500V to 800V

40506	TO-66†	1.7	25	8	1.2	$2.38	$1.73
2N4102	TO-8	2	25	8	1.2	2.22	1.60
40835	TO-5†	3.3	25	6	0.65	2.20	1.60
40945	TO-8	4.5	75	8	1.1	4.58	3.33
2N4101	TO-66	5	75	8	1.2	2.22	1.61
40555	TO-66	5	60	15	1.8	4.76	3.47
40640	TO-66	5	60	15	1.8	2.72	1.98
40641	TO-66	5	60	15	1.8	2.85	2.08
40768	TO-66	5	25	35	4	7.12	5.18
40888	TO-66	5	60	15	1.8	3.10	2.26
40889	TO-66	5	60	15	1.8	3.63	2.64
40833	TO-5■	7	60	6	0.65	2.03	1.48
40834	TO-5◆	7	50	6	0.65	2.12	1.54
40740	PF	10	85	6	0.9	3.38	2.46
40744	Stud	10	85	6	0.9	3.71	2.70
40748	ISO-S	10	85	6	0.9	4.87	3.54
2N4103	TO-3	12.5	80	20	1.5	5.12	3.72
2N1850A	TO-48	16	80	80	3.5	7.56	5.50
40752	PF	20	75	8	1.1	4.95	3.60
40756	Stud	20	75	8	1.1	5.28	3.84
40760	ISO-S	20	75	8	1.1	6.44	4.68
2N689	TO-48	25	65	50	3	8.05	5.85
2N690	TO-48	25	65	50	3	8.67	6.30
2N3873	PF	35	65	25	1.1	7.34	5.34
2N3899	Stud	35	65	25	1.1	7.67	5.58
40216	TO-48	35	60	25	1.1	42.20	34.90
40683	ISO-S	35	60	25	1.1	8.85	6.42
40735	TO-48	35	40	80	1.5	1.49	1.08
40937	PF	35	65	25	1.1	9.24	6.72
40938	Stud	35	65	25	1.1	9.57	6.96
40952	ISO-S	35	60	25	1.1	10.75	7.79

★Include complete Cat. No. i.e. 31-40801. **Modified.

RCA SILICON RECTIFIERS

LOW CURRENT IT(AV) TO 2A

Cat. 31-★	Pkg. Type	VRM(rep) Max. V.	IF(AV) A.	@TA °C.	Net 1-99	100- 999
1N3754	TO-1**	100	.125	65	$0.32	$0.23
1N3755	TO-1**	200	.125	65	.33	.24
1N3756	TO-1**	400	.125	65	.35	.26
1N440B	DO-1	100	.25	150	.53	.38
1N441B	DO-1	200	.25	150	.60	.43
1N442B	DO-1	300	.25	150	.66	.51
1N443B	DO-1	400	.25	150	.79	.58
1N536	DO-1	50	.25	150	.36	.27
1N537	DO-1	100	.25	150	.40	.29
1N538	DO-1	200	.25	150	.45	.32
1N539	DO-1	300	.25	150	.50	.36
1N540	DO-1	400	.25	150	.56	.41
1N547	DO-1	600	.25	150	.79	.57

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RCA SEMICONDUCTORS

RCA SILICON RECTIFIERS CONTINUED

LOW CURRENT IT(VA) TO 2A

Cat. No.	Pkg. Type	VRM(rep) Max. V.	IF(AV) A.	@TA ºC.	Net 1-99	100-999
1N1095	DO-1	500	.25	150	$0.61	$0.48
1N445B	DO-1	600	.4	150	1.12	.82
1N3563	DO-26	1000	.4	75	.94	.69
1N444B	DO-1	500	.425	150	.92	.67
1N3196	DO-26	800	.5	75	.74	.54
1N3256	DO-26	800	.5	75	.78	.57
1N3193	DO-26	200	.75	75	.35	.26
1N3194	DO-26	400	.75	75	.38	.28
1N3195	DO-26	600	.75	75	.53	.39
1N3253	DO-26	200	.75	75	.38	.28
1N3254	DO-26	400	.75	75	.40	.30
1N3255	DO-26	600	.75	75	.56	.41
1N5214	DO-26	800	.75	75	.81	.59
1N5218	DO-26	800	.75	75	.85	.62
1N1763A	DO-1	400	1	75	.42	.30
1N1764A	DO-1	500	1	75	.52	.38
1N2858A	DO-1	50	1	75	.33	.24
1N2859A	DO-1	100	1	75	.37	.27
1N2860A	DO-1	200	1	75	.40	.29
1N2861A	DO-1	300	1	75	.42	.30
1N2862A	DO-1	400	1	75	.48	.35
1N2863A	DO-1	500	1	75	.58	.42
1N2864A	DO-1	600	1	75	.70	.51
1N5211	DO-26	200	1	75	.38	.28
1N5212	DO-26	400	1	75	.42	.30
1N5213	DO-26	600	1	75	.56	.41
1N5215	DO-26	200	1	75	.42	.30
1N5216	DO-26	400	1	75	.45	.33
1N5217	DO-26	600	1	75	.60	.44
40642	DO-26	550	1	45	.99	.72
40643	DO-26	450	1	45	.91	.66
40644	DO-26	550	1	45	.83	.60
44001	DO-15■	50	1	75	.33	.24
44002	DO-15■	100	1	75	.37	.27
44003	DO-15■	200	1	75	.40	.29
44004	DO-15■	400	1	75	.46	.34
44005	DO-15■	600	1	75	.53	.39
44006	DO-15■	800	1	75	.66	.48
44007	DO-15■	1000	1	75	.73	.53
1N5391	DO-15	50	1.5	70	.27	.20
1N5392	DO-15	100	1.5	70	.30	.22
1N5393	DO-15	200	1.5	70	.33	.24
1N5394	DO-15	300	1.5	70	.35	.26
1N5395	DO-15	400	1.5	70	.37	.27
1N5396	DO-15	500	1.5	70	.43	.32
1N5397	DO-15	600	1.5	70	.52	.38
1N5398	DO-15	800	1.5	70	.73	.53
1N5399	DO-15	1000	1.5	70	.93	.68
40266	DO-1	100	2	105	.29	.21
40267	DO-1	200	2	105	.33	.24
40890	DO-1	750	2	$150T_J$	1.24	.90
40891	DO-1	700	2	$150T_J$	1.16	.84

■Modified.

HIGH CURRENT IT(AV) TO 12A

1N1612	DO-4	50	5	135	$0.97	$0.71
1N1613	DO-4	100	5	135	1.11	.80
1N1614	DO-4	200	5	135	1.72	1.25
1N1615	DO-4	400	5	135	3.43	2.50
1N1616	DO-4	600	5	135	4.93	3.59
1N1341B	DO-4	50	6	150	1.12	.82
1N1342B	DO-4	100	6	150	1.30	.95
1N1344B	DO-4	200	6	150	2.01	1.46
1N1345B	DO-4	300	6	150	2.74	1.99
1N1346B	DO-4	400	6	150	3.50	2.54
1N1347B	DO-4	500	6	150	4.21	3.06
1N1348B	DO-4	600	6	150	5.02	3.65
40108	DO-4	50	10	150	.99	.72
40109	DO-4	100	10	150	1.16	.84
40110	DO-4	200	10	150	1.57	1.14
40111	DO-4	300	10	150	2.14	1.56
40112	DO-4	400	10	150	2.48	1.80
40113	DO-4	500	10	150	3.14	2.28
40114	DO-4	600	10	150	3.71	2.70
40115	DO-4	800	10	150	6.60	4.80
1N1199A	DO-4	50	12	150	1.17	.85
1N1200A	DO-4	100	12	150	1.35	.98
1N1202A	DO-4	200	12	150	2.46	1.79
1N1203A	DO-4	300	12	150	3.17	2.30
1N1204A	DO-4	400	12	150	4.04	2.94
1N1205A	DO-4	500	12	150	4.82	3.50
1N1206A	DO-4	600	12	150	5.66	4.12

CONTINUED IN NEXT COLUMN

RCA SILICON RECTIFIERS CONTINUED

HIGH CURRENT IT(AV) 18A TO 40A

Cat. 31-★	Pkg. Type	VRM(rep) Max. V.	IF (AV) A.	@TC ºC	Net 1-99	100-999
1N248C	DO-5	55	20	150	$1.60	$1.16
1N249C	DO-5	110	20	150	1.72	1.25
1N250C	DO-5	220	20	150	2.62	1.92
1N1195A	DO-5	300	20	150	3.18	2.32
1N1196A	DO-5	400	20	150	4.09	2.98
1N1197A	DO-5	500	20	150	5.36	3.90
1N1198A	DO-5	600	20	150	5.78	4.20
1N1183A	DO-5	50	40	150	2.01	1.46
1N1184A	DO-5	100	40	150	2.36	1.72
1N1186A	DO-5	200	40	150	3.42	2.48
1N1187A	DO-5	300	40	150	4.41	3.20
1N1188A	DO-5	400	40	150	5.58	4.08
1N1189A	DO-5	500	40	150	6.55	4.76
1N1190A	DO-5	600	40	150	7.72	5.62
40956	DO-5	50	40	100	3.92	3.24
40957	DO-5	100	40	100	4.35	3.60
40958	DO-5	200	40	100	4.93	4.08
40959	DO-5	400	40	100	7.69	6.36
40960	DO-5	600	40	100	9.70	8.02

HIGH VOLTAGE RECTIFIER ASSEMBLIES

Cat. 31-★	Pkg. Type	VRM(rep) Max. V.	IF (AV) A.	@ TC ºC.	Net 1-29	30-Up
CR110	A	10000	.55	60	$16.30	$15.50
CR109	A	9000	.55	60	15.35	14.60
CR108	A	8000	.55	60	13.90	13.20
CR107	A	7000	.55	60	12.95	12.30
CR106	A	6000	.575	60	12.00	11.40
CR105	A	5000	.625	60	10.55	10.05
CR104	A	4000	.625	60	9.60	9.10
CR103	A	3000	.725	60	8.15	7.75
CR102	A	2000	.825	60	7.20	6.85
CR101	A	1200	.85	60	5.75	5.47
CR212	B	12000	.4	60	12.00	11.40
CR210	B	10000	.4	60	10.10	9.60
CR208	B	8000	.4	60	8.40	8.00
CR206	B	6000	.4	60	6.95	6.60
CR204	B	4500	.4	60	5.75	5.47
CR203	B	3000	.4	60	4.80	4.56
CR201	B	1500	.4	60	3.10	2.96
CR301	C	2400	5	50	28.00	26.55
CR302	C	3600	5	50	40.00	37.95
CR303	C	4800	5	50	51.00	48.45
CR304	C	6000	5	50	57.60	54.72
CR305	C	7200	5	50	73.00	69.35
CR306	C	8400	5	50	83.00	78.85
CR307	C	9600	5	50	93.00	88.35
CR311	C	2400	9	50	30.00	28.50
CR312	C	3600	9	50	42.00	39.90
CR313	C	4800	9	50	53.00	50.35
CR314	C	6000	9	50	64.00	60.75
CR315	C	7200	9	50	75.00	71.25
CR316	C	8400	9	50	85.00	80.75
CR317	C	9600	9	50	95.00	90.25
CR321	C	2400	12	50	35.00	33.25
CR322	C	3600	12	50	49.00	46.55
CR323	C	4800	12	50	62.00	58.90
CR324	C	6000	12	50	76.00	72.20
CR325	C	7200	12	50	90.00	85.50
CR331	C	2400	17	50	37.00	35.15
CR332	C	3600	17	50	52.00	49.40
CR333	C	4800	17	50	65.00	61.75
CR334	C	6000	17	50	79.00	75.05
CR335	C	7200	17	50	93.00	88.35
CR341	C	2400	23	50	44.00	41.80
CR342	C	3600	23	50	61.00	57.95
CR343	C	4800	23	50	78.00	74.10
CR344	C	6000	23	50	94.00	89.30
CR351	C	2400	35	50	46.00	43.70
CR352	C	3600	35	50	64.00	60.80
CR353	C	4800	35	50	82.00	72.90
CR354	C	3600	35	50	98.00	93.10

RCA SEMICONDUCTORS

RCA SK REPLACEMENTS

RCA "Top-Of-The-Line" transistors, rectifiers, and integrated circuits replace thousands of semiconductors used in entertainment-type electronic equipment. The RCA SPG-202 Replacement Guide is given free with each order for SK-Series units.

GERMANIUM NPN TRANSISTORS

Cat.	Application	Net
31-SK3010	Class A voltage amplifier & driver stages for portable receivers. Supply volts to 15V.	$1.26
31-SK3011	RF-Amplifier, converter and IF-amplifier stages for AM broadcast-band rec. Supply volts to 18V.	1.62

GERMANIUM PNP TRANSISTORS

31-SK3003	AF-output, driver and low-level amplifier stages for portable receivers. Supply volts to 9V.	$0.99
31-SK3004	AF-output, driver and low-level amplifier stages for portable receivers. Supply volts to 15V.	1.14
31-SK3005	RF-amplifier, converter and IF-amplifier stages for AM broadcast-band rec. Supply volts to 12V.	1.17
31-SK3006	RF-amplifier, converter and IF-amplifier stages for FM broadcast-band rec. Supply volts to 15V.	1.41
31-SK3007	RF-amplifier, converter and IF-amplifier stages for all-wave rec. Supply volts to 15V.	1.26
31-SK3008	RF-amplifier, converter and IF-amplifier stages for AM broadcast-band auto radios & portable receivers. Supply volts up to 15V.	1.23
31-SK3009	AF-output stages of auto radios, hi-fi amplifier equipment & communications equipment. Supply volts of 14.5V. will supply a power output of 5W in class A.	2.34
31-SK3012	AF-power output stages for auto receivers. Supply volts up to 18V. Typical power output of 5W in Class A.	2.88
31-SK3013	Matched pair of SK3009 transistors.	4.68
31-SK3014	AF-output stages for auto radios, hi-fi amplifier equipment & communications equipment. Supply volts of 16.5V will provide a power output of 5W in Class A.	3.15
31-SK3015	Matched pair of SK3014 transistors.	6.30
31-SK3034	Vertical output & horizontal driver stages for TV-receivers. Supply volts to 36V.	4.50
31-SK3035	Horizontal output stages for TV-receivers using picture tubes with deflection angles up to 114°, ultor voltage rating to 18kV. Supply volts to 36V.	5.49
31-SK3052	AF-output stages of auto radios, hi-fi amplifier equipment & communications equipment. Supply volts up to 18V.	2.35

SILICON RECTIFIERS

31-SK3016	PRV=500, IF=1A, non-insulated case.	$0.57
31-SK3017A	PRV=600, IF=1A, insulated case.	.60
31-SK3030	PRV=200, IF=1A, insulated case.	.42
31-SK3031	PRV=400, IF=1A, insulated case.	.51
31-SK3032	PRV=800, IF=1A, insulated case.	.61
31-SK3033	PRV=1000, IF=1A, non-insulated case.	.81
31-SK3043	PRV=550, IF1A, non-insulated case.	1.80

SELENIUM RECTIFIERS

31-SK3066	PRV=6.5kV, IF=0.3mA.	$3.15
31-SK3067	PRV=11kV, IF=0.3mA.	4.68
31-SK3068	PRV=13kV, IF=0.3mA.	5.04
31-SK3069	PRV=25kV, IF=1mA; High-Voltage Tripler	11.70
31-SK3080	PRV=1000, IF=1A, plastic package.	.81
31-SK3081	PRV=1000, IF=2A, plastic package.	.90

SILICON CONTROLLED RECTIFIER

31-SK3042	Trace & commutating circuits for horizontal deflection stages in TV-receivers. Supply volts up to 129 V-ac. Operating Temp. range: -40 to +100°C.	$3.96

SILICON PNP TRANSISTORS

31-SK3025	AF-drivers & output stages for hi-fi & communications equipment. Supply volts to 80V.	$2.70
31-SK3053	AF-drivers & output stages for hi-fi & communications equipment. Supply volts to 100V.	4.68

SILICON NPN TRANSISTORS

31-SK3018	RF-amplifier, mixer, oscillator & IF-amplifier stages for VHF-TV & FM receivers. Supply volts up to 25V.	$1.35
31-SK3019	Oscillator stages in UHF-TV tuners only. Supply volts up to 25V.	1.47
31-SK3020	Low-level driver & AF-output stages in auto radios phonographs & TV receivers. Supply volts to 120V.	1.32

CONTINUED IN NEXT COLUMN

SILICON NPN TRANSISTORS CONT.

Cat.	Application	Net
31-SK3021	AF-power output stages of line-operated radios phonographs & TV receivers. Supply volts of 120V will provide a power output of 1W.	$1.95
31-SK3024	AF-output & driver stages of hi-fi & communications equipment. Supply volts to 80V.	1.98
31-SK3026	Class A&B audio power amplifier stages of hi-fi power outputs of 5W, "A", and 15W, "B".	1.80
31-SK3027	Class B push-pull audio power amplifier stages for hi-fi & communications equip. Supply volts of 80V will provide a power output of 40W.	3.15
31-SK3028	Matched pair of SK3026 transistors.	3.60
31-SK3029	Matched pair of SK3027 transistors.	6.30
31-SK3036	Class B push-pull audio power amplifier stages for hi-fi & communications equip. Supply volts of 80V will provide a power output of 100W. rms with a 4-ohm load.	5.85
31-SK3037	Matched pair of SK3036 transistors.	11.70
31-SK3038	Small-signal low-noise AF-preamplifier stages for hi-fi & communications equip. Supply to 15V.	1.44
31-SK3039	RF-amplifier, mixer & converter stages for UHF-TV receivers. Supply volts up to 15V.	1.98
31-SK3040	Video output stages of black-and-white TV receivers. Supply voltage up to 140V.	2.25
31-SK3041	AF-power output stages for auto receivers. Supply voltage up to 18V.	2.52
31-SK3044	Gated AGC, color amplifiers & hi-fi voltage regulator circuits in color TV rec. Supply to 275V.	5.49
31-SK3045	Video output, AF-output & hi-voltage regulator circuits in color TV receivers. Supply to 275V.	5.67
31-SK3046	RF-oscillator stages for citizens-band transmitters. Supply voltage up to 12V.	1.98
31-SK3047	RF-driver stages for citizens-band transmitters. Supply voltage up to 12V.	2.88
31-SK3048	RF-output stages for citizens-band transmitters. Supply voltage up to 12V.	5.58
31-SK3049	RF-output stages for citizens-band transmitters. High-power version of SK3048. Supply volts to 12V	8.10
31-SK3054	AF-drivers & output stages for hi-fi communications equipment. Supply volts up to 50V.	2.70

SILICON MOS N-CHANNEL TRANSISTORS

31-SK3050	RF-amplifier stages for VHF TV receivers. Supply voltage up to 15V.	$3.78
31-SK3065	RF-amplifier stages for VHF communications equip.	4.15

LINEAR INTEGRATED CIRCUITS

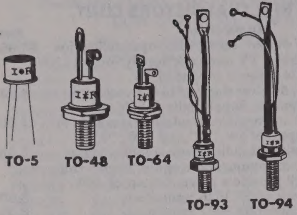
31-SK3022	Linear wide-band amplifier discriminator for sound IF-amplifier stages of TV receivers. Straight leads.	$3.96
31-SK3023	Linear wide-band amplifier discriminator for sound IF-amplifier stages of TV receivers. Formed leads.	3.96
31-SK3070	Automatic frequency control, AFC stages for TV receivers. Supply volts, TCC=30V.	4.70
31-SK3071	Full-function stereo preamplifier stages for hi-fi equipment. Supply voltage, VCC=14V.	7.00
31-SK3072	Sound IF=amplifier stages for TV receivers. Supply voltage, VCC=140V.	5.00
31-SK3073	Chroma signal processor stages for color TV receivers. Supply voltage, VCC=12V.	8.30
31-SK3074	Chroma demodulator stages for color TV receivers. Supply voltage, VCC=12V.	8.55
31-SK3075	Chroma signal processor stages for color TV receivers. Supply voltage, VCC=24V.	7.00
31-SK3076	Chroma amplifier stages for color TV receivers. Supply voltage, VCC=24Volts.	7.00
31-SK3077	Chroma demodulator stages for color TV receivers. Supply voltage, VCC=24V.	7.00

ZENER DIODES

31-SK3055	3.6V ±10%, 1W.	$1.08
31-SK3056	5.1V ±10%, 1W.	1.08
31-SK3057	5.6V ±10%, 1W.	1.08
31-SK3058	6.2V ±10%, 1W.	1.08
31-SK3059	7.5V ±10%, 1W.	1.08
31-SK3060	9.1V ±10%, 1W.	1.08
31-SK3061	10.0V ±10%, 1W.	1.08
31-SK3062	12.0V ±10%, 1W.	1.08
31-SK3063	15.0V ±10%, 1W.	1.08
31-SK3064	27.0V ±10%, 1W.	1.08

The RCA SPG-202 "Top-Of-The-Line" Replacement Guide listing thousands of different types of transistor, rectifier and integrated circuit substitutions is given free with each purchase of SK Semiconductors.

INTERNATIONAL RECTIFIER



SILICON CONTROLLED RECTIFIERS

Choose from this broad Silicon Controlled Rectifier line for your precision switching circuit needs. Covering the current range from 1.6 to 150 amperes, over a voltage PRV range of 25 to 800 volts. International JEDEC "A" series in 5 and 10 amp types provide a wider temperature range as well as more sensitive switching characteristics. The Fast Turn Off Types are available in 5, 16, and 70 amp series. They are designed for inverters and other DC switching applications.

1.6 AMP METAL TO-5 CAN

Gate excitation values @ 25°C: I_{GT} = .2ma, V_{GT} = .8v, T_J = -65° to 125°C.

Cat. No.	Max. PRV	Net 1-99	100-999
316-IR5U	25	$1.50	$1.05
316-IR5F	50	1.65	1.16
316-IR5A	100	2.07	1.45
316-IR5G	150	2.27	1.60
316-IR5B	200	2.48	1.73
316-IR5H	250	2.68	1.88
316-IR5C	300	2.89	2.03
316-IR5D	400	3.30	2.31

Gate excitation values @ 25°C: I_{GT} = 8ma, V_{GT} = .35V, T_J = -40° to 125°C.

316-IR6U	25	$1.43	$1.00
316-IR6F	50	1.50	1.05
316-IR6A	100	1.65	1.16
316-IR6G	150	1.73	1.21
316-IR6B	200	1.80	1.26
316-IR6C	300	3.30	1.83
316-IR6D	400	4.95	2.08

Gate excitation values @ 25°C: I_{GT} = .9ma, V_{GT} = .6v, T_J = -65° to 125°C.

Cat. No.	Max. PRV	Net 1-99	100-999
316-2N1595	50	$1.50	$1.05
316-2N1596	100	1.88	1.31
316-2N1597	200	2.25	1.58
316-2N1598	300	2.63	1.84
316-2N1599	400	3.00	2.10

Gate excitation values @ 25°C: I_{GT} = .9ma, V_{GT} = .6v, T_J = -65° to 125°C.

316-2N1595A	50	$1.73	$1.21
316-2N1596A	100	2.16	1.51
316-2N1597A	200	2.59	1.82
316-2N1598A	300	3.02	2.11
316-2N1599A	400	3.45	2.42

Gate excitation values @ 25°C: I_{GT} = 50ua, V_{GT} = .5v, T_J = -65° to 125°C.

Cat. No.	Max. PRV	Net 1-9	10-99
316-2N2322	25	$1.50	$1.05
316-2N2323	50	1.65	1.16
316-2N2324	100	2.07	1.45
316-2N2325	150	2.27	1.60
316-2N2326	200	2.48	1.73
316-2N2327	250	2.68	1.88
316-2N2328	300	2.89	2.03
316-2N2329	400	3.30	2.31

Gate excitation values @ 25°C: I_{GT} = 50ua, V_{GT} = .5v, T_J = -40° to 125°C.

Cat. No.	Max. PRV	Net 1-9	10-99
316-2N4212	25	$1.65	$1.16
316-2N4213	50	1.82	1.27
316-2N4214	100	2.28	1.60
316-2N4215	150	2.50	1.75
316-2N4216	200	2.73	1.91
316-2N4217	250	2.96	2.07
316-2N4218	300	3.18	2.23
316-2N4219	400	3.63	2.54

3 AMP TO-64

3-junction, hermetically sealed devices, Gate excitation values @ 25°C: I_{GT} = 8ma, V_{GT} = 1v, T_J = -65° to 125°C.

Cat. No.	Max. PRV	Net 1-99	100-999
316-2N1601	100	$5.20	$3.89
316-2N1602	200	6.80	5.09
316-2N1603	300	7.65	5.72
316-2N1604	400	8.40	6.30
316-3RC60A	600	13.55	9.50

5 AMP TO-64

Gate excitation values @ 25°C: I_{GT} = 10ma, V_{GT} = 1.2v.

316-2N1772	100	$3.00	$2.10
316-2N1773	150	4.35	3.05
316-2N1774	200	5.40	3.78
316-2N1775	250	6.37	4.46
316-2N1776	300	7.12	4.99
316-2N1777	400	7.87	5.51
316-2N1778	500	9.75	6.83
316-2N2619	600	12.30	8.61
316-2N1772A	100	3.60	2.52
316-2N1773A	150	5.25	3.68
316-2N1774A	200	6.45	4.52
316-2N1775A	250	7.57	5.30
316-2N1776A	300	8.47	5.93
316-2N1777A	400	9.45	6.62

10 AMP TO-64

Gate excitation values @ 25°C: I_{GT} = 30 ma, V_{GT} = 1.7v.

316-2N1842	25	$2.10	$1.87
316-2N1843	50	2.32	2.18
316-2N1844	100	3.07	2.86
316-2N1845	150	3.75	3.39
316-2N1846	200	4.35	3.68
316-2N1847	250	4.95	3.99
316-2N1848	300	5.40	4.20
316-2N1849	400	6.22	5.15
316-2N1850	500	7.35	6.20
316-2N1842A	25	2.25	1.97
316-2N1843A	50	2.62	2.39
316-2N1844A	100	3.37	3.07
316-2N1845A	150	3.90	3.58
316-2N1846A	200	4.50	3.90
316-2N1847A	250	5.17	4.15
316-2N1848A	300	5.55	4.46
316-2N1849A	400	6.60	5.46
316-2N1850A	500	7.65	6.62
316-10RC60A	600	10.65	8.51
316-10RC80A	800	15.00	12.39
316-10RC100A	1000	20.00	16.28

16 AMP TO-48

Gate excitation values @ 25°C: I_{GT} = 30ma, V_{GT} = 1.5v.

316-2N681	25	$2.35	$2.05
316-2N682	50	2.85	2.50
316-2N683	100	3.60	3.28
316-2N684	150	4.23	3.81
316-2N685	200	4.86	4.13
316-2N686	250	5.41	4.36
316-2N687	300	5.82	4.67
316-2N688	400	6.80	5.72
316-2N689	500	8.11	7.04
316-2N690	600	8.74	8.35
316-2N691	700	14.49	11.13
316-2N692	800	19.15	15.07
316-16RC100A	1000	25.15	21.63

35 AMP TO-48
INVERTER SCR's

Gate excitation values @ 25°C: I_{GT} = 80ma, V_{GT} = 1.5v, T_J = -40° to 125°C.

Cat. No. 316-★	Cat. No. 316-★	Max. PRV	Net 1-9	10-99
2N3649	IR140F	50	$6.15	$4.31
2N3650	IR140A	100	8.00	5.62
2N3651	IR140B	200	12.15	8.51
2N3652	IR140C	300	15.30	10.71
2N3653	IR140D	400	20.85	14.60
2N3654	IR141F	50	6.82	4.78
2N3655	IR141A	100	8.85	6.70
2N3656	IR141B	200	13.27	9.29
2N3657	IR141C	300	16.70	11.71
2N3658	IR141D	400	22.80	15.96

★Use complete Cat. No. when ordering i.e. 316-2N3649 or 316-IR140F.

INDUSTRIAL 40 AMP

Gate excitation values @ 25°C. I_{GT} = 110ma, V_{GT} = 3v.

316-40RCS5	50	$14.00	$ 9.45
316-40RCS10	100	15.70	9.87
316-40RCS20	200	16.70	10.71
316-40RCS30	300	19.85	12.65
316-40RCS40	400	23.75	15.12
316-40RCS50	500	28.00	17.85
316-40RCS60	600	33.00	20.74
316-40RCS70	700	38.00	25.20
316-40RCS80	800	47.00	29.66
316-40RCS90	900	55.00	32.55
316-40RCS100	1000	65.00	37.80
316-40RCS110	1100	75.00	92.00
316-40RCS120	1200	82.00	50.40

50 AMP TO-94

Gate excitation values @ 25°C: I_{GT} = 35ma, V_{GT} = 2v, T_J = -40° to 125°C

316-36RC10A	100	$15.70	$ 9.87
316-36RC20A	200	16.70	10.71
316-36RC30A	300	19.85	12.65
316-36RC40A	400	23.75	15.12
316-36RC50A	500	28.00	17.85
316-36RC60A	600	33.00	20.74
316-36RC80A	800	47.00	29.66
316-36RA50	500	28.50	18.27
316-36RA60	600	33.50	21.26
316-36RA80	800	47.50	30.19
316-36RA100	1000	66.00	41.48
316-36RA110	1100	77.00	48.83
316-36RA120	1200	88.00	55.65
316-36RA130	1300	107.00	66.15
316-36RA140	1400	117.00	78.75
316-36RA150	1500	136.00	93.98
316-36RA160	1600	158.00	111.30

70 AMP TO-94

Gate excitation values @ 25°C: I_{GT} = 35ma, V_{GT} = 2.5v.

316-2N1909	25	$18.50	$11.81
316-2N1910	50	20.00	12.60
316-2N1911	100	22.00	13.91
316-2N1912	150	24.00	15.23
316-2N1913	200	26.00	16.54
316-2N1914	250	29.50	18.64
316-2N1915	300	32.50	20.48
316-2N1916	400	39.00	24.68
316-71RA50	500	42.00	26.50
316-71RA60	600	50.00	31.50
316-71RA80	800	75.00	47.25
316-71RA100	1000	106.00	66.94
316-71RA110	1100	125.00	78.75
316-71RA120	1200	144.00	90.83
316-71RA130	1300	162.00	102.11
316-71RA140	1400	186.00	116.55
316-71RA150	1500	209.00	132.30
316-71RA160	1600	236.00	150.15

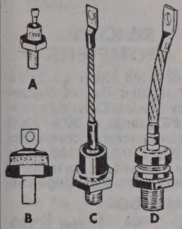
Continued on Next Page.

INTERNATIONAL RECTIFIER

150 AMP TO-93

Gate excitation values @ 25°C: I_{GT} = 50 ma., V_{GT} = 2.5v.

Cat. No.	Max. PRV	Net 1-9	10-99
316-151RC10	100	$47.00	$30.98
316-151RC20	200	51.00	32.03
316-151RC30	300	61.00	37.80
316-151RC40	400	70.00	44.63
316-151RC50	500	86.00	54.08
316-151RC60	600	105.00	65.10
316-151RC80	800	150.00	93.45
316-151RA20	200	56.00	35.44
316-151RA30	300	67.00	42.00
316-151RA40	400	78.00	49.35
316-151RA50	500	95.00	59.85
316-151RA60	600	115.00	72.45
316-151RA80	800	165.00	103.95
316-151RA100	1000	212.00	133.35
316-151RA110	1100	238.00	150.15
316-151RA120	1200	264.00	165.90
316-151RA130	1300	286.00	180.60
316-151RA140	1400	312.00	197.40
316-151RA150	1500	340.00	215.25
316-151RA160	1600	370.00	234.15



LOW POWER 3-16 AMPS

SEE FIG. A.

*When mounted on 1½ x 1½ x 1/16" copper fin, free convection cooling. †When mounted on 3 x 3 x 1/16" copper fin, free convection cooling.

3 AMPS*

Cat. No.	Max. PRV	Net 1-99	100-999
316-3F10	100	$1.20	$0.83
316-3F20	200	2.20	1.52
316-3F30	300	2.75	1.89
316-3F40	400	3.85	2.63
316-3F50	500	4.95	3.47
316-3F60	600	5.85	4.10
316-3F80	800	9.05	6.20
316-3F100	1000	11.75	8.09

6 AMPS†

316-1N1341	50	$1.12	$0.79
316-1N1342	100	1.20	.84
316-1N1343	150	1.57	1.10
316-1N1344	200	2.15	1.52
316-1N1345	300	3.10	2.21
316-1N1346	400	4.05	2.84
316-1N1347	500	4.90	3.36
316-1N1348	600	5.85	4.10

6 AMPS HIGH SURGE

Cat. No.	Max. PRV	Net 1-99	100-999
316-1N3987	700	$7.25	$5.25
316-1N3988	800	8.25	5.88
316-1N3989	900	9.00	6.30
316-1N3990	1000	9.50	6.56

12 AMPS†

316-1N1199	50	1.20	$0.84
316-1N1200	100	1.35	.99
316-1N1201	150	1.75	1.26
316-1N1202	200	2.45	1.73
316-1N1203	300	3.45	2.42
316-1N1204	400	4.40	3.10
316-1N1205	500	5.25	3.68
316-1N1206	600	6.10	4.31
316-1N3670	700	7.80	5.51
316-1N3671	800	8.70	6.14
316-1N3672	900	9.40	6.62
316-1N3673	1000	9.80	6.93

16 AMPS†

Cat. No.	Max. PRV	Net 1-99	100-999
316-1N3615	50	1.35	$0.99
316-1N3616	100	1.50	1.05
316-1N3617	150	1.95	1.42
316-1N3618	200	3.00	2.10
316-1N3619	300	3.90	2.63
316-1N3620	400	4.75	3.20
316-1N3621	500	5.50	3.68
316-1N3622	600	6.70	4.44
316-1N3623	800	9.00	6.04
316-1N3624	1000	10.70	7.14

MEDIUM & HIGH POWER

40 AMPS, FIG. B

For reverse polarity, add suffix R after Cat. No. Same Price.

Cat. No.	Max. PRV	Net 1-99	100-999
316-40HF5	50	$1.55	$1.16
316-40HF10	100	1.95	1.45
316-40HF15	150	2.35	1.74
316-40HF20	200	2.85	2.12
316-40HF30	300	3.65	2.71
316-40HF40	400	4.45	3.30
316-40HF50	500	5.25	3.90
316-40HF60	600	6.00	4.44
316-40HF70	700	6.75	5.01
316-40HF80	800	7.75	5.74
316-40HF90	900	8.80	6.51
316-40HF100	1000	9.90	7.56

150 AMPS FIG. C

316-1N3111	50	$7.00	$6.30
316-1N3085	100	14.50	9.14
316-1N3086	200	16.00	10.08
316-1N3087	300	17.00	10.71
316-1N3088	400	18.20	11.45
316-1N3089	500	19.40	12.18
316-1N3090	600	21.50	13.55
316-1N3091	800	25.00	15.75
316-1N3092	1000	31.50	19.85

250 AMPS FIG. D

Cat. No.	Max PRV	Net 1-9	10-99
316-1N2054	50	$19.50	$12.60
316-1N2055	100	21.00	13.39
316-1N2056	150	23.00	14.44
316-1N2057	200	24.50	15.49
316-1N2058	250	26.00	16.54
316-1N2059	300	27.50	17.33
316-1N2060	350	29.00	18.38
316-1N2061	400	30.50	19.43
316-1N2062	450	32.00	20.48
316-1N2063	500	34.00	21.53
316-1N2064	600	38.00	24.15
316-1N2065	700	41.25	26.25
316-1N2066	800	44.50	28.09
316-1N2067	900	43.50	30.45
316-1N2068	1000	52.50	33.08

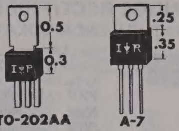
STANDARD TOP HATS

1.3 AMPS

316-10B1	100	$0.50	$0.39
316-10B2	200	.55	.42
316-10B3	300	.65	.54
316-10B4	400	.80	.67
316-10B5	500	.95	.79
316-10B6	600	1.10	.92
316-10B8	800	1.60	1.34
316-10B10	900	2.05	1.72

6 AMP AXIAL-LEAD RECTIFIER 400 AMP SURGE

Cat. No.	Max. PRV	Net 1-99	100-999
316-60S05	50	$0.64	$0.44
316-60S1	100	.68	.47
316-60S2	200	.74	.51
316-60S3	300	.84	.59
316-60S4	400	.93	.65
316-60S5	500	1.15	.81
316-60S6	600	1.35	.95
316-60S8	800	2.50	1.84
316-60S10	1000	3.75	2.75



PLASTIC SCR's

4 AMPS RMS

New commercial plastic SCR's. Molded case, compatible with TO-202AA (other packages available, call for info.). Gate excitation values @ 25°C: I_{GT}=.2ma, V_{GT}= 1v, T_J = -40°C to 110°C.

Cat. No.	Max. PRV	Net 1-99	100-999
316-IR106Y1	30	$0.75	$0.53
316-IR106F1	50	.77	.55
316-IR106A1	100	.81	.57
316-IR106B1	200	.90	.63
316-IR106C1	300	1.12	.68
316-IR106D1	400	1.30	.91

8 AMPS RMS

Model A-7, molded case, compatible with TO-66 mounting. Gate excitation values @ 25°C: I_{GT} = 25ma, V_{GT} = 1.5v, T_J = -40°C to 110°C.

316-IR122F	50	$1.20	$0.84
316-IR122A	100	1.35	.95
316-IR122B	200	1.50	1.05
316-IR122C	300	1.75	1.26
316-IR122D	400	2.00	1.42

SILICON RECTIFIERS

0.75-1.3 AMP FLANGELESS

Repetitive surge current, 6 amps except 1N2103-1N2108, 1½ amps. *Anode to case; all others cathode to case. Size: .220" dia. x .345" long; wire leads.

Cat. No.	Max. PRV	Fwd. Cur.	Net 1-99	100-999
316-10C1	100	1.3	$0.54	$0.50
316-10C2	200	1.3	.60	.56
316-10C3	300	1.3	.68	.63
316-10C4	400	1.3	.76	.70
316-10C5	500	1.3	.85	.79
316-10C6	600	1.3	.90	.84
316-10C8	800	1.3	.97	.91
316-10C10	1000	1.3	1.70	1.26
316-1N2103	50	.75	.50	.47
316-1N2104	100	.75	.54	.50
316-1N2105	200	.75	.60	.56
316-1N2106	300	.75	.68	.63
316-1N2107	400	.75	.76	.70
316-1N2108	500	.75	.85	.79
316-1N3639	200*	.75	.55	.38
316-1N3640	400*	.75	.70	.47
316-1N3641	600*	.75	1.00	.68
316-1N3642	800*	.75	1.40	.95

PLASTIC 1 AMPERE

316-10D1	100	1.0	$0.28	$0.25
316-10D2	200	1.0	.32	.29
316-10D3	300	1.0	.37	.34
316-10D4	400	1.0	.41	.37
316-10D5	500	1.0	.45	.40
316-10D6	600	1.0	.50	.46
316-10D8	800	1.0	.85	.79
316-10D10	1000	1.0	1.20	1.07

TEMP.-COMPENSATED REFERENCE ELEMENTS

§Test Current, 7.5 ma. Tolerance 10%.

Cat. No.	Volts @ §	Temp.‡ Coeff.	Net 1-99	100-999
316-1N821	5.9-6.5	.01	$2.30	$1.94
316-1N823	5.9-6.5	.005	3.05	2.57
316-1N825	5.9-6.5	.002	4.60	3.89
316-1N826	5.9-6.5	.002	6.60	5.51
316-1N827	5.9-6.5	.001	8.75	7.88
316-1N828	5.9-6.5	.001	11.04	9.45
316-1N829	5.9-6.5	.01	11.25	10.61

‡Percent per degree.

INTERNATIONAL RECTIFIER

BRIDGE RECTIFIERS
MINIATURE ENCAPSULATED

To 1.8 amps. Single phase types. 1.5 safety factor of repetitive PRV to WPRV.

Cat. No.	Max. PRV	Net 1-99	100-999
316-18DB2A	200	$2.00	$1.42
316-18DB3A	300	2.30	1.63
316-18DB4A	400	2.60	1.94
316-18DB5A	500	2.75	2.05
316-18DB6A	600	2.90	2.26
316-18DB7A	700	3.25	2.63
316-18DB8A	800	3.50	3.15
316-18DB10A	1000	5.00	3.94

1-PHASE ENCAPSULATED BRIDGE RECT. TO 10 AMPS

Extremely compact full-wave units. Max. DC at 55C of 6 amps and 10 amps. Temp. Range -65C to +150C.

6 AMPS

Cat. No.	Max. PRV	Net 1-99	100-999
316-60FB05L	50	$3.20	$2.57
316-60FB1L	100	3.45	2.78
316-60FB2L	200	4.25	3.36
316-60FB3L	300	4.70	3.68
316-60FB4L	400	5.70	4.46
316-60FB6L	600	7.00	5.51

10 AMPS

Cat. No.	Max. PRV	1-24	25-99
316-100PB05P	50	$4.05	$3.41
316-100PB1P	100	4.30	3.52
316-100PB2P	200	5.15	4.36
316-100PB3P	300	5.55	4.73
316-100PB4P	400	6.35	5.41
316-100PB6P	600	9.95	8.40

ZENER 1-WATT
ENCAPSULATED 10% TOLERANCE

Designed for industrial applications where sharp knees, low Zener impedance, small size and insulated body are of prime consideration. Operating Temperature -55°C to +165°C. Tolerance 10%.

Cat. 316-★	"Z" V.	Test Ma.	Dyn. Ω	Net 1-99	100-999
1N4728	3.3	76	10		
1N4729	3.6	69	10		
1N4730	3.9	64	9		
1N4731	4.3	58	9		
1N4732	4.7	53	8		
1N4733	5.1	49	7		
1N4734	5.6	45	5		
1N4735	6.2	41	2		
1N4736	6.8	37	3.5		
1N4737	7.5	34	4.0		
1N4738	8.2	31	4.5		
1N4739	9.1	28	5.0		
1N4740	10	25	7		
1N4741	11	23	8		
1N4742	12	21	9		
1N4743	13	19	10	No suffix, 10% Tol.	
1N4744	15	17	14		
1N4745	16	15.5	16	$1.25	$ .98
1N4746	18	14	20		
1N4747	20	12.5	22		
1N4748	22	11.5	23	"A" suffix, 5% Tol.	
1N4749	24	10.5	25		
1N4750	27	9.5	35	1.90	1.47
1N4751	30	8.5	40		
1N4752	33	7.5	45		
1N4753	36	7.0	50		
1N4754	39	6.5	60		
1N4755	43	6.0	70		
1N4756	47	5.5	80		
1N4757	51	5.0	95		
1N4758	56	4.5	110		
1N4759	62	4.0	125		
1N4760	68	3.7	150		
1N4761	75	3.3	175		
1N4762	82	3.0	200		
1N4763	91	2.8	250		
1N4764	100	2.5	350		

1-WATT AXAIL-LEAD FLANGELESS

Suffix "B" indicates a 5% tolerance.

1N3016B	6.8	37	3.5		
1N3017B	7.5	34	4.0		
1N3018B	8.2	31	4.5		
1N3019B	9.1	28	5.0		
1N3020B	10	25	7	$3.30	$2.47
1N3021B	11	23	8		
1N3022B	12	21	9		
1N3023B	13	19	10		
1N3024B	15	17	14		
1N3025B	16	15.5	16		
1N3062B	18	14	20		
1N3027B	20	12.5	22		
1N3028B	22	11.5	23		
1N3029B	24	10.5	25		
1N3030B	27	9.5	35	$3.30	$2.47
1N3031B	30	8.5	40		
1N3032B	33	7.5	45		
1N3033B	36	7.0	50		
1N3034B	39	6.5	60		
1N3035B	43	6.0	70		
1N3036B	47	5.5	80		
1N3037B	51	5.0	96		
1N3038B	56	4.5	110		
1N3039B	62	4.0	125		
1N3040B	68	3.7	150	$3.30	$2.47
1N3041B	75	3.3	175		
1N3042B	82	3.0	200		
1N3043B	91	2.8	250		
1N3044B	100	2.5	350		
1N3045B	110	2.3	450		
1N3046B	120	2.0	550		
1N3047B	130	1.9	700		
1N3048B	150	1.7	1000	$3.30	$2.47
1N3049B	160	1.6	1000		
1N3050B	180	1.4	1200		
1N3051B	200	1.2	1500		

10-WATT STUD-MOUNTING

For 5% tolerance, add suffix "A" to the type number. No suffix added to the type number indicates a normal 10% tolerance.

Cat. 316-★	"Z" V.	Test Ma.	Dyn. Ω	Net 1-99	100-999
1N1599	3.9	500	.84		
1N1600	4.7	400	.68		
1N1601	5.6	350	.3		
1N1602	6.8	300	.2	No suffix 10% Tol.	
1N1603	8.2	250	.25		
1N1604	10	200	.55	$5.95	$4.99
1N1605	12	170	.95		
1N1606	15	140	1.5	"A" Suffix, 5% Tol.	
1N1607	18	110	2		
1N1608	22	90	3	$8.00	$6.72
1N1609	27	70	4.5		
1N1805	6.8	1000	1		
1N1806	7.5	1000	1	5.45	4.57
1N1807	8.2	1000	1		
1N1808	9.1	500	1		
1N1809	110	50	. . .		
1N1810	120	50	. . .		
1N1811	130	50	. . .		
1N1812	150	50	. . .		
1N1351	10	500	2		
1N1352	11	500	2		
1N1353	12	500	2		
1N1354	13	500	2	No suffix, 10% Tol.	
1N1355	15	500	2		
1N1356	16	500	2	4.70	4.46
1N1357	18	150	3		
1N1358	20	150	3		
1N1359	22	150	3	"A" suffix, 5% Tol.	
1N1360	24	150	3		
1N1361	27	150	3	6.30	5.93
1N1362	30	150	4		
1N1363	33	150	4		
1N1364	36	150	5		
1N1365	39	150	5		
1N1366	43	150	6		
1N1367	47	150	7		
1N1368	51	150	8		
1N1369	56	150	9		
1N1370	62	50	12		
1N1371	68	50	14		
1N1372	75	50	20		
1N1373	82	50	22		
1N1374	91	50	35		
1N1375	100	50	. . .		

50-WATT STUD-MOUNTED

All types listed have 10% tolerance.

Cat. 316-★	"Z" V.	Test Ma.	Dyn. Ω	Net 1-99	100-999
1N3305	6.8	1850	.4		
1N3306	7.5	1700	.5		
1N3307	8.2	1500	.6		
1N3308	9.1	1370	.7	$4.75	$4.36
1N3309	10	1200	.8		
1N3310	11	1100	.9		
1N3311	12	1000	1		
1N3312	13	960	1.1		
1N3313	14	890	1.2		
1N3314	15	830	1.4	$4.75	$4.36
1N3317	18	700	2.0		
1N3321	24	520	2.6		
1N3323	27	460	2.8		
1N3324	30	420	3.0		
1N3325	33	380	3.2		
1N3326	36	350	3.5	$4.75	$4.36
1N3331	50	250	5.0		
1N3340	100	1.20	20		

FAST RECOVERY

SILICON RECTIFIERS

Choose from either a 6 or 12 Amp rectifier line of fast recovery diodes. Covering a voltage PRV range of 50 to 1000 volts, and reverse recovery times of 200, 350, and 500 nanoseconds. They are designed for use in invertors, power supplies and other equipment.

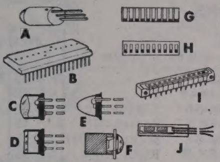
6 AMP DO4

Cat. 316-★	Max. PRV	trr ns	Net 1-99	100-999
1N3879	50	200	$1.38	$1.01
1N3880	100	200	1.62	1.13
1N3880	200	200	2.64	1.89
1N3882	300	200	3.84	2.71
1N3883	400	200	4.98	3.53
6FL50	500	200	6.00	4.16
6FL60	600	200	7.20	5.04
6FT5	50	350	1.32	.97
6FT10	100	350	1.55	1.09
6FT20	200	350	2.53	1.82
6FT30	300	350	3.68	2.59
6FT40	400	350	4.78	3.38
6FT50	500	350	5.75	3.99
6FT60	600	350	6.90	4.83
6FT80	800	350	9.96	6.93
6FT100	1000	350	13.56	9.89
6FV5	50	500	1.15	.84
6FV10	100	500	1.35	.95
6FV20	200	500	2.20	1.58
6FV30	300	500	3.70	2.26
6FV40	400	500	4.15	2.94
6FV50	500	500	5.00	3.47
6FV60	600	500	6.00	4.20
6FV80	800	500	9.55	6.65
6FV100	1000	500	14.00	9.48

12 AMP DO4

1N3889	50	200	$2.40	$1.76
1N3890	100	200	2.69	1.97
1N3891	200	200	4.50	3.90
1N3893	400	200	6.42	4.73
12FL60	600	200	9.12	6.70
12FT5	50	350	2.30	1.69
12FT10	100	350	2.59	1.90
12FT20	200	350	4.31	3.18
12FT40	400	350	6.15	4.53
12FT60	600	350	8.30	6.43
12FT80	800	350	12.30	9.05
12FT100	1000	350	18.00	13.23
12FV5	50	500	2.00	1.47
12FV10	100	500	2.24	1.65
12FV20	200	500	3.75	2.76
12FV40	400	500	5.35	3.94
12FV60	600	500	7.60	5.59
12FV80	800	500	11.79	9.72
12FV100	1000	500	17.25	12.68

PHOTOCELLS & READERS



OPTO-HYBRID READERS

Supply voltage 5v-dc. Max. current requirements per channel: 6 mA. Min. Output High Light; 4½ v-dc; Max. Output Low Dark: .4 v-dc. Operating Temp. Range: 0 to 75°C. *9-Holes. †12-Holes.

Cat. 165-★	See Fig.	Threshold Min.	mW/cm² Max.	Net Ea.
OH100	A	2.5	10.0	$3.50
OH102	A	1.0	3.0	3.85
OH106	A	. . .	0.2	4.25
OH106A	A	.03	0.1	4.60
OH900	B*	. . .	10.0	36.00
OH900A	B*	. . .	10.0	54.00
1200	B†	. . .	10.0	63.00
1200A	B†	. . .	10.0	94.50

LIGHT EMITTING DIODES

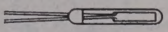
Cat. 165-★	See Fig.	Case Type	Po@If Min.	Net Ea.
CL100	C	TO-18(L)	1.0mW	$6.00
CL110	E	TO-18(E)	.25mW	2.70
CL110A	E	TO-18(E)	.50mW	3.00
CL110B	E	TO-18(E)	.60mW	3.30
CL150	F	DO-31	.27mW	4.00

2-ELEM. NULL INDICATOR

See Fig. J. Nominal overall dimensions excluding leads: Case=.063 H. x .10W. x .44L. Null= .02 wide. Voltage: 250mV measured at 280 foot-candles, 2800°K, 10K load.

Cat. 165-HLSN-221 **Net $13.30**

SILICON MICROMINIATURE PHOTO-VOLTAIC DETECTOR CAPSULES



.08" Dia.
.5" Long

For use with punched cards or tapes, for light detection, infrared sensing, counting devices, etc. Glass capsule hermetically seals solar cell to withstand 'the most rigorous environmental conditions. Photovoltaic cells require no external bias, but convert light energy into electric power. Output impedance low. Operating temp. -65° C. to +150° C. Spectral response 0.4 to 1.15 microns wavelength. Response time less than 10 micro sec.

Cat. No.	Output Mv.	Output µa.	Net 1-99	100-999
165-EA7E1	300	300	$8.00	$6.70
165-EA7E2	300	300	7.00	5.90
165-EA7E3	250	250	5.80	5.00

INTERNATIONAL RECTIFIER

SELF-GENERATING PHOTO-CELLS

B2M

For powering transistor radios, building light meters, operating lights, controlling doors, etc. Spectral response same as human eye. ½" x ¾".

Cat. No.	------Output-------- V.	Ma.	Net Each
316-B2M	0.2-0.4	2	$1.89

PUNCHED TAPE & CARD SENSORS

Normal polarity is P on N (common cathode). Speed of response is 10µs or less, depending on load resistance. Spectrol Response: Range, 0.4 to 1.15 microns; Peak, 0.85 microns.

PUNCHED TAPE SENSOR

Cat. No.	---Sensor---- Pos.	Spacing	Output µA	Net Each
165-HPC-3	3	.100	205-345	$5.80
165-HPC-5	5	.100	205-345	9.65
165-HPC-7	7	.100	205-345	13.30
165-HPC-9	9	.100	205-345	17.30

PUNCHED CARD SENSOR

Cat. No.	--Sensor---- Pos.	Spacing	Output µA	Net Each
165-HSR-3	3	.087	100-140	$7.00
165-HSR-6	6	.087	100-140	14.00
165-HSR-9	9	.087	100-140	21.30
165-HSRA-12	12	.250	250±20%	29.00

SILICON SOLAR CELLS

Convert light into electric energy to operate electronic devices, burglar alarms, turn on flood lights, etc. Spectral response: range 0.4 to 1.15 microns; peak 0.85 microns. Response speed 20 µ-sec. or less, depending on load resistance.

Cat. No.	---Load Output--- Mv.	Ma.	Mw.	Net 1-99	100-499
165-2A	400	127.0	49.0	$9.35	$8.50
165-110C	400	21.4	8.5	2.35	2.10
165-52C	400	20.0	8.0	4.40	4.00
165-51C	400	9.3	3.7	3.20	2.90
165-55C	400	4.6	1.8	1.90	1.75
165-58C	400	2.2	.88	1.60	1.45

CELL DIMENSIONS

2A	1.125" dia.	51C	0.2" x 0.4"
110C	0.4" x 0.4"	55C	0.2" x 0.2"
52C	0.2" x 0.8"	58C	0.2" x 0.1"

HIGH EFFICIENCY SOLAR CELLS

Speed of response 10 microseconds or less, depending on load resistance. Light source: a solar simulator with spectral distribution of space sunlight as determined by F.S. Johnson, of NRL with intensity equivalent to 140 mw/cm² earth orbit sunlight. Size: 0.4 x 0.8"; active area, 0.28 sq. in.

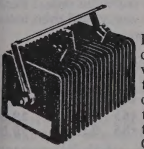
Cat. No. 165-	------Output ---- Mv.	Ma.	Mw.	Net 1-99	100-499
N120CG-8L	430	45.5	19.6	$5.10	$4.10
N120CG-9L	430	51.5	22	5.60	4.60
N120CG-10L	430	56.9	24.5	6.55	5.35
N120CG-11L	430	62.7	27	9.60	7.85

RCA PHOTOMULTIPLIER MANUAL

192-pages of up-to-the-minute information on construction, operation and applications for designers and users of electro-optical equipment. Well written and illustrated.

Cat. 31-PT-61 Manual **Net $2.50**

INTERNATIONAL RECTIFIER



Designed to fulfill commercial and industrial dc power requirements. Highly efficient, lightweight and compact, these units will give trouble-free performance over long periods of operation. Standard types mount by a threaded stud passing through the center of the plates. Single plate types have eyelet. Center-tap units are positive at the tap, except JD4346B. This unit is rated at 100 amps with 800 LFM forced air.

1ø Half Wave

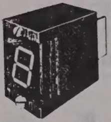
Cat. No.	Volts DC	Amps DC	Volts AC rms	L x W x H inches	Net Ea.
316-J14C1	0-14	1.5	36	1-1/8x1½x1-13/16	$2.00
316-J14C5	0-14	4.8	36	1-1/8x3x3-5/8	4.94
316-J14C8	0-14	8.4	36	1-7/8x4x5-1/8	6.62
316-J14C17	0-14	17.0	36	2-1/8x5x7-1/4	9.87
316-JD116K	6-12	2.0	33 c-t	½x3x3	2.00
316-JD117K	6-12	3.0	33 c-t	½x4x4	2.66
316-JD241K	6-12	6.0	33 c-t	½x5x6	4.04
316-BCF60	0-14	60	33 c-t	2½x4x6	8.93
316-BCF100	0-14	100	33 c-t	4 x 4 x 6	12.29
316-BCR60	0-14	60	33 c-t	2½x4x6	8.93
316-BCR100	0-14	100	33 c-t	4 x 4 x 6	12.29

1ø Full Wave

316-J29B04	0-29	0.4	36	1-1/8x1x1-1/4	2.57
316-J29B1	0-29	1.5	36	1-1/8x1½x1-13/16	3.68
316-J29B5	0-29	4.8	36	1-1/8x3x3-5/8	10.19
316-J29B8	0-29	8.4	36	1-7/8x4x5-1/8	13.86
316-J29B17	0-29	17.0	36	2-1/8x5x7-1/4	21.00
316-J58B04	0-58	0.4	72	2-1/4x1-1/2x1-13/16	4.20
316-J58B1	0-58	1.5	72	4-3/16x3x3-5/8	5.88
316-J58B5	0-58	4.8	72	4-3/16x4x5-1/8	17.12
316-J58B8	0-58	8.4	72	5-5/8x5x7-1/4	23.63
316-J58B17	0-58	17.0	72	3-13/16x1x1-1/4	36.75
316-J116B04	0-116	0.4	144	3-13/16x1½x1-13/16	7.35
316-J116B1	0-116	1.5	144	7-3/16x3x3-5/8	10.29
316-J116B5	0-116	4.8	144	7-3/16x4x5-1/8	30.66
316-J116B8	0-116	8.4	144	10¼x5x6¼	43.05
316-J116B17	0-116	17.0	144	4-9/16x1x1¼	67.20
316-J135B04	0-135	0.4	180	4-9/16x1½x1-13/16	8.93
316-J135B1	0-135	1.5	180	8-11/16x3x3-5/8	12.50
316-J135B5	0-135	4.8	180	8-11/16x4x5-1/8	37.49
316-J135B8	0-135	8.4	180	12-9/16x5x7¼	52.50
316-J135B17	0-135	17.0	180	2¼x1½x2	81.90

ALCO READOUT INDICATORS

SERIES MS MOSAIC READOUT INDICATORS



Display of 0-9 numerals and some alphabetic indications by illuminating a combination of lamps through a diode-matrix or encoding switch (not supplied). Decimal points used as colon when 2 units are placed together. High illumination display. Efficient and closely interlocked illuminated segments provide a bright wide-viewing angle of approximately 150°. Plug-in is accomplished through a standard 10-terminal printed circuit connector. Optional color filters available. SPECIFICATIONS: (MS Series) Figure size is 25/32" high. Standard Voltages are 6 and 14 volts. Bulb life: 20,000 hrs. Current drain: (per increment) 6.3V 50 ma., 14V 20 ma. Opening size: .827"W x 1.34" H. Body Size: .827"W x 1.73"H. x 1.69"D. Lightweight cast aluminum; excellent heat dissipation. (MSM Miniature Series) as above, except smaller. Figures only .472" high, 100,000 hour bulb life. Body size: .433" w. x 1.15" h. x 1.18" d. Available as 5V.

†Also available as symbol indicators (+–). Change "A" to "S" in cat. no. Same price.

Cat. No. 448-*	.Volts	Net 1-9	10-24
MS-6A†	6.3	$ 8.25	$ 7.01
MS-14A†	14	8.25	7.01
MSM-5A†	5 Miniature	8.25	7.01
MS-SKT	Socket (MS)	1.15	.98
MSM-SK	Socket (MSM)	1.15	.98
MS-SK-R	Right Angle Socket (MS)	1.55	1.32
MS-FLV	Filter, violet	.40	.34
MS-FLR	Filter, red	.40	.34
MS-FLG	Filter, green	.40	.34

*Include entire Cat. No. when ordering.

INCANDESCENT READOUT INDICATORS

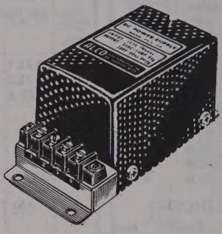
Miniature 7-segment readout used T-1 incandescent lamps that have the long life of neons. Easy to read figures are on a single plan to provide a bright display that is clearly read under all ambient lighting conditions. Contrast is emphasized and glare is minimized because of its filter. The flat, single-plane display allows true wide angle viewing without distortion. Character size .250" x .458". Overall size is .484" x 1.068" making it extremely compact. The mating socket has a snap-in-mount. Makes use of high temperature materials housed in one-piece metal case. Lamps are closely fitted into a compartmented block with short leads virtually eliminating vibration problems. The readout is easily removed by simply unplugging it from the 8-prong keyed socket.

Cat. No.	Volts	Description	Net 1-24	25-99	100-499
448-MS-250AR	2.5	Num. Red w/socket	$8.25	$7.01	$6.10
448-MS-250AC	2.5	Num. Clear w/socket	8.25	7.01	6.10
448-MS-250SR	2.5	Sym. Red w/socket	8.25	7.01	6.10
448-MS-250SC	2.5	Sym. Clear w/socket	8.25	7.01	6.10
448-MS-5030ER	5V	Num. Red w/socket	6.25	5.31	4.69
448-MS-5030EC	5V	Num. Clear w/socket	6.25	5.31	4.69
448-SKT-41B	. . .	Socket for MS	.48	.41	.36

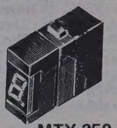
LOGIC POWER SUPPLY

5V section is compatible to MSDD-700 Series decoder drivers. Provides 200 v-dc @ 0-50mA unregulated, and 0-1A regulated. Ripple less than 3mV.

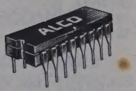
Cat. 448-PS-51-117 Input 117v-ac, 60Hz **Net $39.95**



PS-51-117



MTX-250



MSDD-

PLUG-IN DECODER DRIVER MODULE

Packaged module includes decoder-driver and plugs directly into mating readout. MS-250A. Completely assembled. Color coded leads.

Cat. 448-MTX-250 Decimal to 7 decoder **Net $12.85**

BCD-TO-7 SEGMENT DECODER DRIVERS FOR INCANDESCENT DISPLAY DEVICES

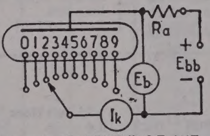
16-lead dual-in-line packages to drive 7-segment incandescent display devices. For MS-6, MSM-5A above.

Cat.	Description	1-24	25-99	100-
448-MSDD-702	80mA/Seg. w/DEC. Pt.	$6.50	$5.53	$4.88
448-MSDD-703	80mA/Seg. w/Ripple Blank	6.50	5.53	4.88

NATIONAL ELECTRONICS

NL-7094

NL-7977/
4032



BASIC READOUT TUBE CKT.

READOUT TUBES

FOR IN-LINE DISPLAY OF NUMERALS, LETTERS OR SYMBOLS

Readout Tubes are gas-filled, cold cathode diodes with multiple cathodes. Each cathode is shaped like the display character and has a separate base pin electrical connection. When negative voltage is applied to the selected character base pin the character shape glows with a pleasing orange-red neon color. Readout tubes are simple, rugged and long lasting. They are easily read even under high ambient light. *Ionization voltage. †Less base pins.

Cat. No.	Characters Range	Characters Ht.	Life Char.	D-C Volts Ion*	D-C Volts Supply Ebb	Max. Cur. Ik.	O'All Dia.	O'All Ht.†	Temp. Limits °F.	Oz. Wt.	Net Each
235-NL-7977/4032	0 to 9	0.310"	Long	170	170-250-300	1.5 ma.	0.680"	0.940"	-65 to +85	0.14	$19.00
235-NL-7009	0 to 9	0.310"	Standard	170	170-250-300	2.0 ma.	0.650"	0.925"	-65 to +85	0.14	19.00
235-NL-4031	+ & –	0.310"	Long	170	170-250-300	1.5 ma.	0.680"	0.940"	-65 to +85	0.14	19.00
235-NL-8421/5092	0 to 9	0.610"	Long. Wide angle	170	170-250-300	3.5ma.	1.080"	1.125"	-65 to +85	0.4	15.75
235-NL-6844A	0 to 9	0.610"	Standard	170	170-250-300	4.0 ma.	1.080"	1.125"	-65 to +85	0.4	11.00
235-NL-5992	+ & –	0.610"	Long. Rect.	170	170-250-300	3.5 ma.	1.020"	1.120"	-65 to +70	0.3	15.75
235-NL-50911	+ & –	0.610"	Long. Wide angle	170	170-250-300	3.5 ma.	1.080"	1.125"	-65 to +85	0.4	15.75
235-NL-8423/6091	0 to 9	0.808"	Long. Wide angle	170	170-250-300	4.5 ma.	1.350"	1.212"	-65 to +85	0.6	19.00
235-NL-7153	0 to 9	0.808"	Standard	170	170-250-300	5.0 ma.	. . . . .	. . . . .	-65 to +85	0.6	14.50
235-NL-8091	0 to 9	1.375"	Long. Wide angle	170	170-250-300	6.5 ma.	2.060"	2.280"	-65 to +85	1.7	22.50
235-NL-7094	0 to 9	2.000"	Long. Wide angle	300	300	7.5 ma.	3.100"	2.650"	-65 to +85	4.0	45.00

SOCKETS FOR ABOVE

Cat.	Used With	Net
235-RTS-1	NL-8423/6091, NL-6844A, NL-8421/5092, NL-50911.	$0.90
235-RTS-2	NL-8423/6091, NL-6844A, NL-8421/5092, NL-50911.	.75

Cat.	Used With	Net
235-RTS-3	NL-7009, NL-4021, NL-7977/4032, NL-4031.	1.00
235-RTS-4	NL-5991, NL-5992.	.90
235-RTS-5	NL-7094, NL-8091.	1.25

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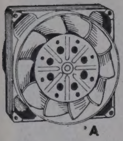
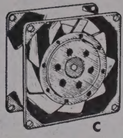
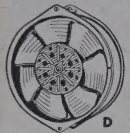
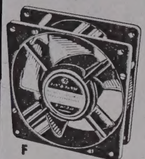








MIN[redacted] FANS
FOR HIGH RELIABILITY APPLICATIONS

All metal construction. Precision die cast housing, hub and impellers. Corrosion resistant. Warp free, Natural heat sink. Powerful Shaded Pole or Induction type motors. Hand fitted sleeve bearings. Extremely low internal heat rise. Impedance protected. Efficient inside-out design. Long life: 20,000 + operational hours, continuous duty at 45°C (115°F.) without maintenance. Precision engineered and tested. Large oil lubrication reservoir. Dynamically balanced rotor. Maximum air delivery at higher back pressures. 60 cycle performance at 50 cycles. Tested to applicable portion of MIL specification. Tested to U.L. acceptance. Types shown below are for 115-v operation. Also available for 220-v operation.

CHARACTERISTICS CHART

Model No.	@ 115-V, 50-60 Hz. Air Flow	Watts	Dimensions Inches	Wt.
1000A	125 cfm	25	4½ x 4½ x 2	2 lb. 10 oz.
1500S	105 cfm	25	4½ x 4½ x 2	1 lb. 10 oz.
2500S	115 cfm	25	4½ x 4½ x 2	2 lb. 1 oz.
3000	65 cfm	15	3½ x 3½ x 2	1 lb. 2 oz.
4500C	115 cfm	19	4½ x 4½ x 1½	1 lb. 4 oz.
4500P	115 cfm	19	4½ x 4½ x 1½	1 lb. 4 oz.
4600P	130 cfm	20	4½ x 4½ x 1½	1 lb. 4 oz.
5500S	140 cfm	42	4-5/8x4-5/8x2	2 lb. 3 oz.
7500S	250 cfm	40	6 dia. x 2	2 lb. 7 oz.
8500C	43 cfm	15	3-1/8x3-1/8x1½	18½ oz.
8500P	43 cfm	15	3-1/8x3-1/8x1½	18½ oz.

STANDARD FANS & BLOWERS

Cat. No.	See Fig.	Type Motor	Net 1-9	10-24	25-49
381-1500S	A	4½" Shaded-Pole	**$23.65**	**$21.35**	**$19.50**
381-2500S	B	4½" Shaded-Pole	**23.65**	**21.35**	**19.50**
381-4500C	E	4½" Shaded-Pole	**13.60**	**12.30**	**11.25**
381-5500S	E	4½" Shaded-Pole	**30.30**	**27.40**	**25.00**
381-7500S	D	6" dia. Shaded Pole	**37.35**	**33.75**	**30.80**
381-8500C	C	3-1/8" Shaded-Pole	**15.45**	**13.95**	**12.75**
381-1000A	A	4½" Induction	**29.05**	**26.25**	**23.65**
381-3000	C	3½" Induction	**25.00**	**22.60**	**20.30**
381-1004*	Cap. for Model 1000A		**2.75**	**2.50**	**2.25**
381-1005*	Cap. for Model 3000		**2.75**	**2.50**	**2.25**

* The above induction type fan prices do not include the cost of applicable capacitor where required. Specify when ordering.

NEW PENTAFLOW MODELS

Pentaflow premium grade miniature fans are the quietest, most efficient, most reliable fans in a wide range of air-cooling systems, in equipment for instrumentation, communications, data-processing, recording hospitals, laboratories, studios, and industrial control. Model 4500P has low noise and high volume air flow. Model 4600P is Ball-thrust bearing design. Handles 30% higher back pressure than average 4½" design. 8500P is Ultra-compact. All Pentaflow models have special silicone-base lubricant for longest life.

Cat. No.	See Fig.	Type	Net 1-9	10-24	25-49
381-4500P	F	4½" Pentaflow	**$17.70**	**$16.05**	**$14.75**
381-4600P	F	4½" Pentaflow†	**19.20**	**17.35**	**15.95**
381-8500P	F	3-1/8" Pentaflow	**19.20**	**17.35**	**15.95**

†Ball bearing type.

OPTIONAL ACCESSORIES

Cat.	Accessory	For Series	Net
381-5501	Brackets (Pair)	2500, 4500, 4500P, 4600P	**$0.25**
381-5502	Filter	2500, 4500, 4500P, 4600P	**2.00**
381-5503	Screen Assembly	2500, 4500, 4500P, 4600P	**2.50**
381-5504	Fingerguards	2500, 4500, 4500P, 4600P	**1.35**
381-5505	Plug & Cord	4500, 4500P, 4600P	**.60**
381-5506	Fingerguards	7500	**3.00**
381-5507	Fingerguards	1000A, 1500	**.85**
381-5508	Fingerguards	8500	**.85**
381-5509	Air Straightener	7500	**3.50**
381-5511	Adapter Ring	7500	**1.50**

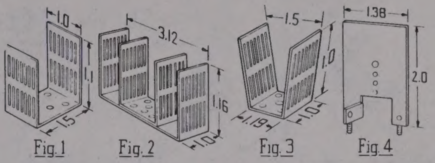
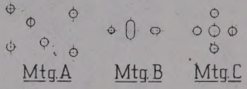


Fig.1 Fig.2 Fig.3 Fig.4



Mtg.A Mtg.B Mtg.C

SMITH
SEMI-CONDUCTOR HEAT SINKS

Thermovane types made of pre-painted .060" aluminum for use on printed circuit boards. †Thermal.

Cat. No.	See Fig.	Mtg. Pat.	For Case Styles	Res. °C/W†	Std. Pkg.	Net Pkg.
242-6275	1	A	TO-3	9.5	100	**$18.00**
242-6276	1	B	TO-66, MD-17	9.5	100	**18.00**
242-6277	2	A	TO-3	5.6	50	**17.00**
242-6279	2	B	TO-66, MD-17	5.6	50	**17.00**
242-6280	3	C	TO-36 Stud Mtd. Types	10.0	100	**18.00**
242-6281	4	–	Flat Packs	15.1	50	**18.50**

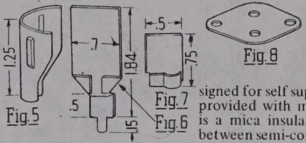


Fig.5 Fig.6 Fig.7 Fig.8

Manufactured of selver-bearing copper, except Fig. 5 prepainted aluminum .018" thick. Designed for self support, except Fig. 6 provided with mounting lug. Fig. 8 is a mica insulating washer for use between semi-conductor and chassis.

Cat. No.	See Fig.	For Case Styles	Res. °C/W†	Std Pkg.	Net 100
242-6282	5	TO-5	46	100	**$10.50**
242-6283	6	152	40-43	100	**3.00**
242-6284	7	All "D" styles TO-92 TO-98	72	100	**9.00**
242-6285	8	Mica wafer for TO-3		100	**7.50**
242-6286	8	Mica wafer for TO-66		100	**7.50**

CINCH

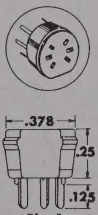


Fig. 1

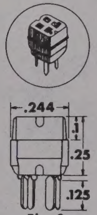


Fig. 2

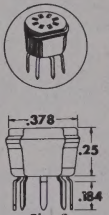


Fig. 3

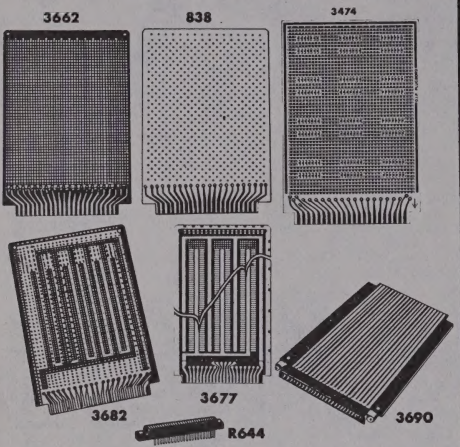
MINIATURE SEMICONDUCTOR SOCKETS
FOR TO-5 AND TO-18 CASE DEVICES

This group of semiconductor sockets, for printed circuit board insertion, covers the standard configuration in most common use today. Their low profile (.25") makes them especially applicable in high density applications. All units are made of MFE, mica-filled phenolic, and the six position TO-5 socket (014-6-MSS-1), is also available in FEP fluorocarbon resin. All models have PC board terminal mounting, 6 and 8 contact models are suitable for chassis terminal mounting. These Cinch sockets have low contact resistance (0.5Ω), low capacitance (1.3pF, 1pF for FEP), and insulation resistance of over 1000 megohms. They are rated at 1.0 amperes and 750 volts AC.

Cat. No.	Socket Size	No. of Contacts	Fig. No.	Net 1-49	50-99	100-249
014-3-MSS	TO-5	3	1	**$0.17**	**$0.14**	**$0.11**
014-4-MSS	TO-5	4	1	**.35**	**.29**	**.23**
014-6-MSS	TO-5	6	2	**.48**	**.40**	**.32**
014-6-MSS-1	TO-5	6	2	**1.00**	**.84**	**.67**
014-8-MSS	TO-5	8	2	**.58**	**.48**	**.38**
014-3-MSS-2	TO-18	3	3	**.24**	**.20**	**.16**
014-4-MSS-2	TO-18	4	3	**.33**	**.28**	**.22**

“VECTORBORDS [redacted]

“PLUGBORD” & RECEPTACLE
PLUG-IN CIRCUIT CONSTRUCTION



UNIVERSAL TYPE 3662

Versatile D.I.P. type plugbords with boards punched in overall pattern of .042” diameter holes on .1” centers and furnished without any etched circuit pattern. FR-4 epoxy glass per MIL-P-13949 Type FL-GF. Has 44 2 oz. etched gold plated contacts (total 2 sides). Mates with R644 receptacle. Size: 6.5 x 4.5” Wide.

Cat. 245-3662 Universal “Plugbord” **Net Ea. $7.30**

DISCRETE COMPONENT TYPE 838

These boards are 4½” x 6½” x 1/16” and have an overall grid of .062” diameter holes on alternate .1” centers. Epoxy glass Type FL-GF per MIL-P-13949. Mate with R644 receptacle. Etched gold plated contacts.

Cat. 245-838AWE-1GN	22 Contacts	**Net Ea. $4.94**
Cat. 245-838WE-1GN	44 Contacts	**Net Ea. 6.10**

D.I.P. PLUGBORD TYPE 3677 & 3682

Both types supplied with overall punched grid of .042” diameter holes spaced .1” apart etched buses 1 side for Vcc and ground plus individual pad areas are tinned. Fr-4 epoxy glass per MIL-P-13949 Type FL-GF. Gold plated contacts (2 sides. Both types mate with R644 receptacle 6.5” x 4.5” wide. Type 3677 mounts up to 24 D.I.P. 14-lead units or 21 16-lead units. Type 3682 mounts up to 54 D.I.P. 14-pin units or 48 16-pin units. Both types have 44 contacts.

Cat. 245-3677-2	Mounts 24 D.I.P. w/14-leads	**Net Ea. $8.84**
Cat. 245-3682-2	Mounts 54 D.I.P. w/14-pins	**Net Ea. $8.49**

“X-Y” MATRIX D.I.P. PLUGBORDS

2 oz. copper .070” wide etched tinned lines running vertically one side, horizontally reverse side, or vertically one side only (“Y” Type). Vertical lines interrupted to mount 14 lead D.I.P.’s. Connections between board sides are made with soldered inbord pins or wires. Etched tinned lines can be cut with knife or line cutter tool P-139. Board material epoxy paper type PX per MIL-P-13949. Gold plated contacts. All boards are 6.5 x 4.5” including aluminum Kardej frame which fits 1/16” card guides.

Cat.	Matrix	Contacts	Net
245-3474	X-Y	44 etched, 2 sides	**$10.50**
245-3474-3	Y	22 etched, 1 side	**8.08**
245-3474-2	None	44 etched, 2 sides	**7.95**

EXTENDER 3690

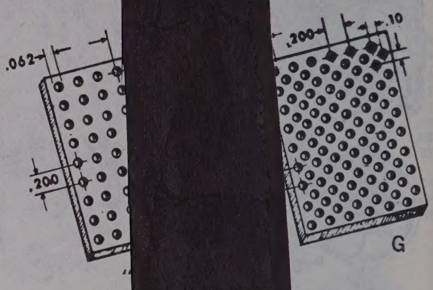
Extender permits operation of wired plugbords, outside of card enclosures. Plug-in portion has 44 (total 2 sides) .156” spaced gold plated contacts connected to a 44 contact permanent mounted receptacle. 4½” wide x 8” long x 1/16” thick, flame retardant epoxy glass.

Cat. 245-3690 Extender **Net Ea. $9.45**

R644 RECEPTACLE

Dual side contacts are for use with 1 or 2 sided copperclad boards shown above. Insulating material molded glass filled Diallyl Phthalate. Contacts are phosphor bronze. Sel. Rex.00003” gold flash.

Cat. 245-R644 44 contact receptacle **Net Ea. $2.97**



PUN SS
INSULATING BOARDS
FOR PRINTED CIRCUITS

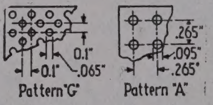
Printed circuit boards may be made to your special requirements by using the resist paint or pressure-sensitive tape strips and dots to block in the circuit. They can then be etched to leave the copper coating only where wanted. Pressure-sensitive tapes, etching fluids, trays, etc., are listed under KEPRO on the preceding page of this catalog. Boards are 1/16” thick. Pre-punched holes facilitate mounting components on the finished printed circuit board. Copper coating is .003” thick, does not continue through the holes. Uncoated XXXP Phenolic Pre-punched Terminal Boards are listed in this catalog.

COPPER-CLAD 1 SIDE

Cat.	Fig.	Width x Lgth.	Holes	Net
245-85F42WEC1	F	16.99” x 8.51”	85 x 42	**$8.31**
245-42F22C1	F	4.5” x 8.51”	42 x 22	**1.09**
245-3070-1WE	F	6.5” x 4.5”	28 x 22	**1.55**
245-42G22WEC1	G	8.5” x 4.5”	(42 x 22) 2	**2.65**
245-42G22WEC2*	G	8.5” x 4.5”	(42 x 22) 2	**2.90**

*Copper clad 2 sides.

VECTORBORD
PRE-PUNCHED TERMINAL BOARD



Especially useful in both breadboard and production models of electronic equipment. It provides a pre-punched grid which takes 245-T28 or 245-T9.4 Push-In terminals as listed below, or self-tapping screws. May be cut to any required size, or easily broken along a line of holes when necessary. Made Of (*) XXXP Phenolic, (†) Epoxy Paper of (§) Epoxy Glass with (‡) .093” dia. holes on .265” centers or (#) .062” holes on alternate .1” centers.

Cat.	Thick	Sheet Size	Holes	Net
245-32AA9*‡	1/16	2.41 x 8.51	32 x 9	**$0.67**
245-64AA18*‡	3/32	4-13/16 x 17	64 x 18	**1.82**
245-64A18*‡	1/16	4-13/16 x 17	64 x 18	**1.42**
245-64A18WE§‡	1/16	4-13/16 x 17	64 x 18	**4.06**
245-64AA32*‡	3/32	8½ x 17	64 x 32	**3.12**
245-42G24WE§#	1/16	4-13/16 x 8½	(42 x 23) x 2	**1.97**
245-85G24EP†#	1/16	4-13/16 x 17	(85 x 24) x 2	**2.28**
245-85G42EP†#	1/16	8½ x 17	(85 x 2) x (42 & 41)	**3.95**
245-85G24WE§#	1/16	4-13/16 x 17	(85 x 24) x 2	**3.96**

27XA ETCHED CIRCUIT KIT
HAS EVERYTHING BUT HOT WATER

Specially designed for lab use in making uncomplicated etched circuits. Kit built around Vectoresist, Vector’s rub-on resist transfer sheet. Resist lines, dots, or connector pattern transfer by rubbing to furnished 2 oz. copper clad prepunched boards in minutes. Then etch in etchant furnished in heavy plastic bag with special activator in as little as 30 minutes. Kit includes 2 copper clad boards, 4½” x 6½”, .2 centers, 2 bags of etchant, 8½” x 11” sheet rub-on Vectoresist, layout paper, complete instructions. See Kit above for Vectoresist details.

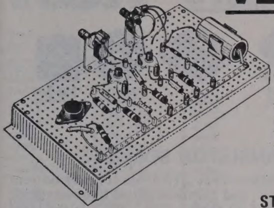
Cat. 245-27XA Etched Circuit Kit **Net Ea. $6.95**

NEW PHOTORESIST ETCHED CIRCUIT KIT

Designed to produce in minimum time one or more sharply detailed etched circuit boards from easily made master positive. Kit contains 1 4.5” x 6.5” and 1 4.5” x 2.73” copper clad (1 side) phenolic board sensitized with POSITIVE acting photoresist, developer, etchant, transfer patterns, mylar sheet, cut and peel sheet, touch-up resist and brush, developing tray, and glass exposure plate.

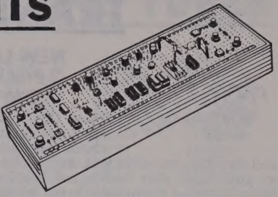
Cat. 245-32X Photoresist Etched Circuit Kit **Net $8.95**

VECTOR COMPONENTS



EXPERIMENTER CHASSIS KITS

Quick, easy set-up kits for experimental and prototype circuit construction. Supplied with all hardware such as solderable Push-In or solderless SPRING-CLIP terminals. VECTORBORD (pre-punched terminal board), chassis supports, tube or transistor sockets, bus strip, layout paper, etc.



STARTER ASSORTMENT

4.8" x 8½" x 2" aluminum chassis with 3/32" thick Vectorbord deck. 3 each 7 & 9 pin tube sockets and 2 octal sockets. 75 T9.4 puch-in terminals; 20 T30N-2 solderless springclip with insertion tool; 3 sheets layout paper; 54 assorted screws, nuts, spacers.

Cat. 245-20X Starter Experimenter Kit **Net $6.95**

KIT FOR TRANSISTOR CIRCUITRY

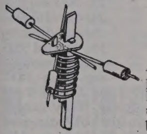
4.8" x 8½" x 2" aluminum chassis with 3/32" Vectorbord deck. 2 power and 6 universal transistor sockets; 75 push-in terminals; 20 solderless springclip terminals; 6 hookup patchcords, bus strip, terminal installing tool, bare and insulated hookup wire, 4 pot and switch brackets, 134 assorted screws, nuts, spacers, brackets.

Cat. 245-22X Kit for transistor circuits **Net $12.50**

SOLDERLESS TUBE & TRANSISTOR KIT

8½" x 17" x 2" aluminum chassis with 3/32" Vectorbord deck. 2 power and 6 universal transistor sockets with pigtails, 3 each 7 & 9 pin tube sockets, 2-8 pin octals, 100 push-in terminals, 90 solderless springclips terminals, 10 solderless U-clips, 10 hookup patchcords, bus strip, 8 wafers to make solderless sockets, terminal installation tools, bare and insulated wire, grid layout paper, 4 pot and switch brackets, 204 assorted screws, nuts, brackets, Board has 3/32" diameter holes on .265" centers.

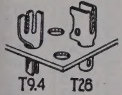
Cat. 245-25X Solderless Experimenters Kit **Net $22.50**



SPRING-LOADED PUSH-IN TERMINALS

A reliable, truly solderless terminal for experimental circuitry. Fits the .093" dia. holes in the Vectorbord listed above. Holds up to six leads without soldering and may be used over and over. Also permits reusing expensive components which are normally damaged by soldering and removal. Consists of a half-hard brass post and washer, steel spring. Silver plated.

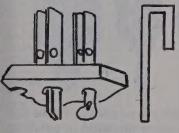
Cat.	Description		Net
245-T32	Fits 3/32" dia. hole	**Bag/10**	**$1.56**
245-T32-1	Fits 1/16" dia. hole	**Bag/100**	**11.43**
245-P136	Insertion tool for T32	**Each**	**1.75**



PUSH-IN TERMINALS

For use with the Vectorbord listed above, or for insertion into .093" or .062" dia. holes in other insulating materials. They hold firmly, but may be staked for permanency. Serrated slots hold most capacitor and resistor, diode and transistor leads snugly. Furnished in bags of 100 or 1000. Fused tin plated.

Cat.	For	Material	Net 100	Net 1000
245-T9.4	.093"	Brass	**$1.49**	**$10.69**
245-T9.6	.093"	Beryllium Copper	**2.59**	**16.44**
245-T28	.062"	Beryllium Copper	**1.61**	**11.44**



MICRO-KLIP PUSH-IN TERMINALS

T42-1 is berylium copper, Tintillate plating. Main slot holds 3 or 4 .025" dia. wires. Hole in tab for .018" transistor lead. Use P149 insertion tool. T44 miniwrap terminal has .025" sq. Wire-Wrap tail, extends 9/16" behond board surface to permit 5 #26AWG connections, 6 turns ea. Phosphor bronze, tintillate plate. Use A13 installation tool. K32 "J" Pin has long .025" square tail for Wire-Wrap. Tail can be used with patchcords, and soldered to connecting wires. Fits holes .025" sq. and .042" dia. Pins are phosphor bronze, .025" sq. with 0.1" spacing between legs. Tintillate plating. No insertion tool required.

Cat.	Description	Net 100	Net 1000
245-T42-1	Micro-Klip Terminals	**$1.82**	**$11.70**
245-T44	Mini-Wrap Terminals	**2.96**	**21.48**
245-K32	"J" Pin Terminals	**1.69**	**12.65**

INTEGRATED CIRCUIT EXPERIMENTER'S KITS

A special group of kits especially designed for fast, easy hookups of nearly all package configurations of integrated circuits. Kit contains 14 & 16 pin DIP sockets, TO-5 ICP sockets, transistor sockets, flatpack adapter plates, T42-1 terminals, K24C inbord pins, Adapter wafers, "Daisy Chain" patchcords, DIP extractor tool, insertion tool for terminals, bus strips, layout paper, special contacts, assorted wire, mounting hardware and P pattern Micro-Vectorbord.

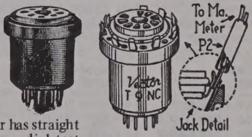
Cat. 245-29X I-C Experimenter's Kit **Net $59.75**

COMPACT ASSORTMENT I-C KIT

Contains 8.6" x 4.6" aluminum chassis with "P" pattern Micro-Vectorbord. .042" dia. holes on .1 ctrs., chassis bus strips, 100 micro-klip T42-1 terminals and one P149 installing tool, 50 K32 "J" terminals for wire wrapping, bare and insulated hook-up wire, 2 sheets grid layout paper and adhesive to mount DIP sockets.

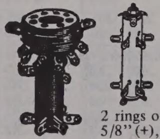
Cat. 245-30X Compact I-C Kit **Net $10.75**

TUBE SOCKET TEST ADAPTERS



Regular type provides a way to make voltage resistance and wave form measurements from tube socket electronic equipment. Adapter has straight thru connections extended to radial test tabs on the adapter skirt surrounding the socket. Current test adapters, (denoted by C in Cat. No.) permit current measurement as well as voltage checks. Has double test tabs connected to plug and socket contacts. When double sided insulated probe is inserted, circuit is "broken" and current measurement can be made without cutting any leads. Fits new telescoping shield bases as well as regular type. Capacity between leads is 1 mmfd. Cross over voltage between terminals is in excess of 1500 volts DC. Beryllium copper contacts.

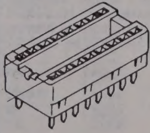
Cat.	Description	Net
245-T-7-M	7-pin Miniature Adapter	**$2.14**
245-T-8-O	8-pin Octal Adapter	**2.26**
245-T-9-N	9-pin Noval Adapter	**2.26**
245-T-789	Kit, 1-each of above	**7.25**
245-T-7-M-C	7-pin, Min. Curr. Test Adapt.	**3.68**
245-T-8-O-C	8-pin Octal Curr. Test Adapt.	**4.62**
245-T-9-N-C	9-pin Min. Curr. Test Adapt.	**3.94**
245-P-2	Double sided probe for above	**1.19**
245-T-789-C	Set of Curr. Test type in case	**14.07**



VECTOR TURRETS

Clever mounting devices for modular mountings of resistors and capacitors. Socket turrets have tube or transistor socket attached to phenolic post with 2 rings of 6 each cadmium plated terminals spaced 5/8" (+), 1" (**), or 1-3/8" (#) apart. Terminal turrets and transistor have 4-40 recessed nut in end for mounting or projecting 6-32 screw. Saves mounting space.

Cat. No.	Socket Type	Mounting	Net Ea.
245-10-0-12T#	Octal	Saddle	**$0.92**
245-8-M-12T**	Miniature 7	Saddle	**.99**
245-8-N-12T**	Miniature 9	Saddle	**.99**
245-8-12**	....	6-32 screw	**.77**
245-10-12#	....	6-32 screw	**.81**
245-6-A-12T-440+	Transistor	4-40 nut	**1.43**
245- 9-A-12T-440#	Transistor	4-40 nut	**1.49**
245-S-7	Shield base for 7-pin types		**.19**
245-S-9	Shield base for 9-pin types		**.10**



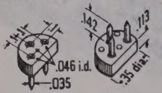
I-C SOCKETS (D.T.P.)

14 & 16 CONTACTS

Intended for soldering directly to printed circuit pads. Also have leads which slip directly into Vector D.I.P. Plugbords and then bend over to contact P.C. copper. Glass filled nylon. Phosphor bronze Cont.

Cat. 245-R714-1	14-cont.	**Pkg./5**	**$3.20**
Cat. 245-R716-1	16-cont.	**Pkg./5**	**$3.85**

TRANSISTOR & I-C SOCKETS

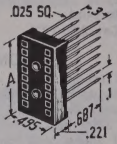


NEW LOW PROFILE 3-PIN P.C. SOCKET

FOR TO-5 CASE

These high quality sockets incorporate many unique features necessary for high circuit reliability. Contacts and springs are formed as a one-piece unit. Beryllium copper contacts. Contacts are gold plated after forming and have double springs that provide better electrical contact and better wiping action. Low profile design, only 0.130" above the P-C board surface. The socket is molded from 20% glass-filled nylon to provide higher ambient heat resistance: Current rating is 2.5 Amps. Contact Res: 0.0005 ohms. Insulation Res: 100,000 Megohms.

Cat. No.	Color	Net 1-24	25-49	50-99	100-249
14-3-LPS-B	Black	$0.22	$0.176	$0.147	$0.118
14-3-LPS-N	Natural				
14-3-LPS-G	Green				

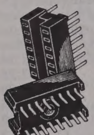


NEW LOW PROFILE WIRE WRAP SOCKETS

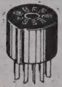
14 & 16 PIN

Designed to accept I.C. packages with flat or rolled leads and variation in thickness or diameter .014/.019". Socket body provides tapered channels to guide I.C. leads. Protective orifice to exclude oversize leads and helps to align leads before engagement with contact springs. Dielectric housing or insulator is molded from glass nylon. Contact is fabricated from fine grain, grade A phosphor bronze material. Available in gold or tin finish. Operating Temperature -65°C. to +125°C. Wire wrap length 0.670 sufficient for 3 wraps. Insulator is Glass-Nylon.

Cat. No.	No. Contacts	Insulator Color	Net 1-24	25-49	50-99	100-249
14-14-W-DIP	14 Tin	Black	$0.84	$0.67	$0.57	$0.45
14-14-W-DIP-1	14 Tin	White	.84	.67	.57	.45
14-14-W-DIP-2	14 Gold	Black	1.09	.87	.72	.48
14-14-W-DIP-3	14 Gold	White	1.09	.87	.72	.48
14-16-W-DIP	16 Tin	Black	1.03	.82	.68	.55
14-16-W-DIP-1	16 Tin	White	1.03	.82	.68	.55
14-16-W-DIP-2	16 Gold	Black	1.28	1.03	.86	.68
14-16-W-DIP-3	16 Gold	White	1.28	1.03	.86	.68

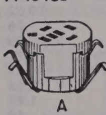


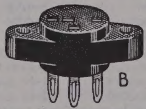
CINCH INTEGRATED CIRCUIT SOCKETS



For use in testing, prototype and production applications. These sockets provide a convenient way to install and remove IC packages, reduce lead breakage, protect hermetic seals, and achieve high environmental stability. *Bodies are molded of GP black phenolic with electro-tinned beryllium copper contacts. All others are molded of diallyl phthalate with gold plated beryllium copper contacts.

Cat. No.	Contacts and Pattern	Ea. 1-24	25-49	50-99	100-249	250-499
14-14-DIP*	14 .100 x .300	$0.86	$0.69	$0.57	$0.46	$0.44
14-14-DIP-1	14 .100 x .300	1.12	.90	.75	.60	.57
14-16-DIP*	16 .100 x .300	.95	.76	.64	.51	.48
14-16-DIP-1	16 .100 x .300	1.23	.98	.82	.66	.62
14-24-DIP*	24 .100 x .600	1.43	1.15	.96	.78	.74
14-24-DIP-1	24 .100 x .600	1.69	1.35	1.13	.91	.87
14-6-ICS	6 dia. .243"	.61	.48	.41	.34	.32
14-8-ICS	8 dia. .243"	.72	.59	.49	.39	.38
14-10-ICS	10 dia. .274"	.81	.64	.54	.44	.41


A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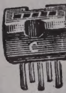
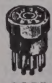
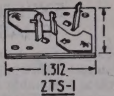

2H5


8SM

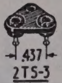
UNIVERSAL & SUBMINIATURE TYPE TRANSISTOR SOCKETS

Fig. A is a universal type which accepts 3 or 4 in-line, triangular lead configuration, or four leads in square locating tab. Mica-filled bodies. Fig. B for (Jetec-30). Subminiature types used in hearing aids, radios which require subminiature tubes. 2H5 may be used for 4-prong tubes or transistors. *Not illustrated.

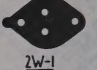
Cat.	Type	Net	Cat.	Type	Net
14-7UTS	Fig. A	$0.85	14-2H6	6-pin	$0.98
14-2TS4	Fig. B	.15	14-2H7	7-pin	.38
14-2H3*	3-pin	.26	14-8SM	8-pin	.56
14-2H5	5-pin	.21			

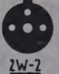


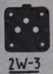
2TS-1



2TS-3


2W-1


2W-2

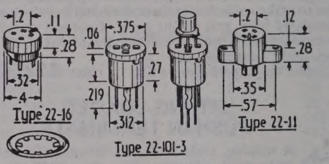

2W-3

POWER TRANSISTOR SOCKETS

To fit TO-3 Outline Transistors. Type 2TS-1 has top and bottom plates of natural XP Bakelite, and cadmium-plated brass contacts. The metal plate has formed 6-32 thread. Type 2TS-2 is the same but has eyelets for mounting to a chassis. Type 2TS-3 is molded of general purpose Bakelite. Contacts are phosphor bronze, cadmium plated. Types 2W-1, 2W-2 and 2W-3 are hard anodized aluminum insulating washers for power transistors. They have high thermal conductivity, high dielectric resistance, and high resistance to abrasion and corrosion.

Cat. No.	Unit Description	Ea. 1-49	50-99
14-2TS-1	TO-3 transistor outline socket	$.112	$.102
14-2TS-2	Same, with mounting eyelets	.112	.102
14-2TS-3	General purpose bakelite socket	.112	.102
	Insulater Washer		
14-2W-1	For Motorola 2N-179, 2N-176, 2N-554	$0.67	$0.67
14-2W-2	For Delco 2N-174	.62	.62
14-2W-3	For Texas Instrument 2N-389	1.13	1.13

GRAYHILL TRANSISTOR SOCKETS



Type 22-11-4 is for mounting by means of rivets or #2 machine screws. Types 22-16-3 and 22-16-4 are for soldering directly to printed circuits, or mounting in a "D" hole by means of a Tru-Arc ring. Types 22-101-3 and 22-101-4 are for soldering to printed circuits or ring mounting. They accept transistor leads of .100 circle-of-centers and .016/.019 dia. and have thru-holes for transistor leads so that leads do not have to be trimmed to a particular length for test purposes. All are molded of materials per MIL-M-42E. *Melamine Type CMG, all others Mica-Filled Phenolic Type MFE.

Cat. No.	No. Pins	For Transistor Outlines	Ea. 1-49	50-99
301-22-16-3	3	TO-5, -9, -11, -16, -26, -29, -31, -39	$0.40	$0.32
301-22-16-4	4	TO-12, -33	.45	.36
301-5115-31	--	Mounting ring only	.03	.023
301-22-11	4	TO-12, -33	.45	.36
301-22-101-3	3	TO-18, -28, -46	1.45	1.16
301-22-101-4	4	. . . .	1.65	1.32
301-5115-31	--	Mounting ring only	.03	.023
301-22-18-3*	3	TO-5, -9, -11, -16, -26, -29, -31, -39	.50	.40
301-22-18-4*	4	TO-12, -33	.55	.44
301-5115-31	--	Mounting ring only	.03	.023

POMONA ADAPTERS

Socket adapters are used to bring pin terminals to above chassis for easy voltage or continuity tests. Socket savers are used in existing tube checker sockets to prolong life. *Compactron. †Tall.

Use With	SOCKET ADAPTERS Cat.	Net	SOCKET SAVERS Cat.	Net
7-pin min.	349-TVS-7	$1.85	349-SS-7	$1.95
8-pin oct.	349-TVS-8	2.15	349-SS-8	2.50
9-pin min.	349-TVS-9	1.95	349-SS-9	1.95
Kit of 3	349-TVS-789	5.95	349-SS-789	6.40
9-pin novar	349-1779	2.25	349-1751	2.50
12-pin com.*	349-TVS-12	2.55	349-SS-12	2.75
7-pin min.†	349-1447	1.95	. . . .	. . . .
9-pin min.†	349-1449	2.15	. . . .	. . . .

RECEIVING TUBES

Type No.	Net 1-9	10-49
0Z4	$2.15	$1.91
0Z4A	2.15	1.91
1AD2A	2.13	1.91
1AY2A	2.03	1.82
1B3GT	2.18	1.96
1BC2A	1.88	1.69
1BH2A	1.95	1.76
1BX2	2.25	2.03
1BY2A	2.23	2.00
1DG3A	2.25	2.03
1DK29	1.48	1.33
1G3GTA	2.18	1.96
1H5GT	1.95	1.76
1K3A	2.18	1.96
1L6	6.90	6.21
1N5GT	2.45	2.21
1R5	2.85	2.56
1RK23	1.28	1.15
1S2A	1.28	1.15
1S5	1.70	1.53
1T4	2.13	1.91
1U4	2.13	1.91
1U5	1.88	1.69
1V2	1.30	1.17
1X2A	2.25	2.03
1X2B	2.25	2.03
1X2C	2.25	2.03
2A3	5.38	4.85
2AF4B	2.25	2.03
2AH2	2.13	1.91
2AS2A	2.13	1.91
2AV2	1.73	1.55
2BJ2	2.30	2.07
2BN4A	1.95	1.76
2BU2	2.13	1.91
2CN3A	2.23	2.00
2CW4	2.68	2.41
2CY5	2.68	2.41
2DS4	2.68	2.41
2DV4	3.55	3.20
2DZ4	2.25	2.03
2EG4	3.40	3.06
2ER5	1.85	1.67
2FH5	1.85	1.67
2FQ5A	2.10	1.89
2FS5	2.65	2.39
2GK5	2.10	1.89
2GU5	2.25	2.03
2HA5	2.10	1.89
2HQ5	2.10	1.89
3A2	2.75	2.48
3A3	2.00	1.80
3A3C	2.20	1.98
3AF4A	2.25	2.03
3AL5	1.45	1.31
3AT2B	2.13	1.91
3AU6	1.63	1.46
3AW2A	2.23	2.00
3AW3	2.20	1.98
3B2	2.20	1.98
3BA6	1.18	1.06
3BC5	1.63	1.46
3BL2A	2.25	2.03
3BM2	2.08	1.87
3BN2A	2.00	1.80
3BN4A	1.70	1.53
3BN6	2.60	2.34
3BS2A	2.33	2.09
3BT2	2.33	2.09
3BU8	2.65	2.39
3BW2	2.33	2.09
3BY6	1.50	1.35
3BZ6	2.05	1.85
3CA3A	2.03	1.82
3CB6	1.48	1.33
3CE5	1.63	1.46
3CF6	1.48	1.33
3CN3B	2.25	2.03
3CS6	2.03	1.82
3CUCA	2.68	2.41
3CX3	2.00	1.80
3CY3	2.40	2.16
3CY5	2.08	1.87
3CZ3A	2.38	2.14
3DB3	2.40	2.16
3DC3	2.53	2.27
3DF3	2.33	2.09
3DG4	3.18	2.86
3DJ3	2.33	2.09
3DK6	1.95	1.76
3DT6A	1.80	1.62
3DZ4	2.25	2.03
3EH7	1.28	1.15
3EJ7	1.28	1.15
3ER5	2.45	2.21
3FH5	1.63	1.46
3FS5	2.38	2.14
3GK5	2.10	1.89
3GS8	2.65	2.39
3HM5	2.10	1.89
3HQ5	3.10	2.79
3HS8	2.15	1.94
3JC6A	2.78	2.50
3KT6	2.08	1.87
3MP26	2.15	1.94
3Q4	1.68	1.51
3Q5GT	2.93	2.63
3S4	1.70	1.53
3V4	2.45	2.21
4AU6	2.13	1.91

Type No.	Net 1-9	10-49
4AV6	$1.63	$1.46
4BC5	1.10	.99
4BC8	2.18	1.96
4BL8	1.20	1.08
4BQ7A	2.20	1.98
4BS8	3.13	1.91
4BU8	2.43	2.18
4BZ6	2.05	1.85
4BZ7	2.20	1.98
4CB6	1.48	1.33
4CS6	2.03	1.82
4CY5	1.35	1.22
4DE6	1.48	1.33
4DK6	1.88	1.69
4DT6A	2.08	1.87
4EH7	1.95	1.76
4EJ7	1.95	1.76
4ES8	2.75	2.48
4EW6	1.45	1.31
4GJ7	1.70	1.53
4GK5	2.10	1.89
4GS7	1.85	1.67
4GS8	2.43	2.18
4GX7	2.53	2.27
4HA5	1.18	1.06
4HA7	2.13	1.91
4HC7	2.13	1.91
4HM6	1.70	1.53
4HQ5	2.53	2.27
4HS8	2.03	1.82
4JC6A	2.75	2.48
4JD6	2.53	2.27
4JH6	1.85	1.67
4KE8	3.33	2.99
4KN8	3.85	3.47
4KT6	2.60	2.34
4LJ8	2.40	2.16
4LU6	1.85	1.67
4MP12	2.15	1.94
4RHH2	2.20	1.98
5AM8	2.68	2.41
5AN8	2.85	2.57
5AQ5	2.05	1.85
5AR4	2.33	2.09
5AS4A	1.68	1.51
5AT8	2.40	2.16
5AU4	2.08	1.87
5AW4	1.40	1.26
5B8	1.75	2.48
5BC3A	1.88	1.69
5BK7A	2.00	1.80
5BQ7A	2.35	2.12
5BR8	2.68	2.41
5BT8	1.55	1.40
5BW8	2.25	2.03
5BZ7	2.35	2.12
5CG8	2.20	1.98
5CL8A	2.68	2.41
5CQ8	2.05	1.85
5CZ5	2.23	2.00
5DH8	2.75	2.48
5DJ4	1.78	1.60
5EA8	3.10	2.79
5EU8	2.18	1.96
5EW6	2.20	1.98
5FG7	2.53	2.27
5FV8	2.68	2.41
5GH8A	2.58	2.32
5GJ7	1.63	1.46
5GM6	1.80	1.62
5GS7	1.82	1.64
5GX6	1.80	1.62
5GX7	2.53	2.27
5HA7	2.13	1.91
5HB7	1.70	1.53
5HG8	1.85	1.67
5HZ6	1.80	1.62
5J6	1.78	1.60
5JK6	2.10	1.89
5JW8	1.60	1.44
5KD8	1.38	1.24
5KE8	3.33	2.99
5KZ8	2.13	1.91
5LJ8	2.40	2.16
5MB8	2.00	1.80
5MHH3	1.78	1.60
5T8	2.23	2.00
5U4G	1.73	1.55
5U4GB	1.68	1.51
5U8	2.58	2.32
5U9	1.55	1.40
5V3A	2.08	1.87
5V4GA	2.35	2.12
5V6GT	1.85	1.67
5X8	2.08	1.87
5Y3GT	1.75	1.63
5Y4GT	1.70	1.53
5Z3	2.45	2.21
5Z4	1.75	1.63
6A8	3.55	3.20
6AB4	1.98	1.78
6AC7	3.15	2.84
6AC10	2.33	2.09
6AD10	4.43	3.98
6AF3	2.18	1.96
6AF4	2.68	2.41
6AF4A	2.68	2.41
6AF6G	3.78	3.40
6AF9	1.78	1.60
6AF11	2.85	2.57

Type No.	Net 1-9	10-49
6AG5	$2.35	$2.12
6AG7	4.23	3.80
6AG9	3.43	3.08
6AH4GT	1.63	1.46
6AH6	3.20	2.88
6AH9	2.60	2.34
6AK5	2.60	2.34
6AK8	1.65	1.49
6AK10	2.78	2.50
6L3	1.43	1.28
6AL5	1.63	1.46
6AL7GT	4.43	3.98
6AL11	3.13	2.81
6AM4	3.60	3.24
6AM8A	2.53	2.27
6AN4	3.08	2.77
6AN8A	2.75	2.48
6AQ5A	1.85	1.67
6AQ6	1.80	1.62
6AQ7GT	2.35	2.12
6AQ8	1.50	1.35
6AR5	1.35	1.22
6AR8	2.95	2.66
6AR11	2.88	2.59
6AS5	2.20	1.98
6AS8	2.85	2.57
6AS11	3.03	2.72
6AT6	1.03	.92
6AT8A	2.83	2.54
6AU4GTA	2.85	2.57
6AU6A	1.63	1.46
6AU8A	3.10	2.79
6AV5GA	2.85	2.57
6AV6	1.48	1.33
6AV11	2.40	2.16
6AW8A	2.45	2.21
6AX3	1.88	1.69
6AX4GTB	2.03	1.82
6AX5GT	2.13	1.91
6AX8	1.93	1.73
6AY3B	2.03	1.82
6AY11	2.95	2.66
6AZ8	3.00	2.70
6B10	2.45	2.21
6BA3	1.53	1.37
6BA6	1.80	1.62
6BA7	3.23	2.90
6B8A	2.85	2.57
6BA11	2.68	2.41
6BC4	2.95	2.66
6BC5	1.80	1.62
6BC7	1.80	1.62
6BC8	2.68	2.41
6BD6	1.27	1.18
6BD11	3.08	2.77
6BE3	2.45	2.21
6BE6	1.88	1.69
6BF5	1.68	1.51
6BF6	1.55	1.40
6BF11	2.78	2.50
6BG6G	3.93	3.53
6BH6	2.20	1.98
6BH8	2.53	2.27
6BH11	2.58	2.32
6BJ3	1.63	1.46
6BJ6	2.23	2.00
6BJ7	1.48	1.33
6BJ8	2.38	2.14
6BK4C	4.08	3.67
6BK5	1.75	1.58
6BK7B	2.60	2.34
6BL7GTA	3.33	2.99
6BL8	1.48	1.33
6BM8	1.45	1.31
6BN4A	1.98	1.78
6BN6	2.48	2.23
6BN8	2.35	2.12
6BN11	2.83	2.54
6BQ5	2.13	1.91
6BQ6GTB	2.95	2.66
6BQ7A	2.73	2.48
6BR3	2.33	2.09
6BR8A	2.85	2.57
6BS3A	2.03	1.82
6BS8	2.73	2.45
6BU8	2.78	2.50
6BV8	1.80	1.62
6BV11	2.70	2.43
6BW3	2.15	1.94
6BW4	1.50	1.35
6BW8	2.58	2.32
6BW11	2.83	2.54
6BX7GT	3.25	2.93
6BY5GA	2.40	2.16
6BY6	1.88	1.69
6BY8	1.48	1.33
6BY11	2.75	2.48
6BZ3	2.45	2.21
6BZ6	1.70	1.53
6BZ7	2.73	2.45
6C4	2.03	1.82
6C5	2.93	2.64
6C6	3.93	3.53
6C9	3.00	2.70
6C10	2.03	1.82
6CA4	2.08	1.87
6CA5	1.65	1.49
6CA7	2.95	2.66
6CB5A	5.43	4.88
6CB6A	1.80	1.62

Type No.	Net 1-9	10-49
6CD3	$2.15	$1.94
6CD6GA	3.65	3.29
6CE3	2.15	1.94
6CE5	1.80	1.62
6CF6	1.80	1.62
6CG3	2.15	1.94
6CG7	1.63	1.46
6CG8A	2.35	2.12
6CH3	2.05	1.85
6CH8	2.80	2.52
6CJ3	2.05	1.85
6CK3	2.05	1.85
6CK4	1.78	1.60
6CL3	2.05	1.85
6CL6	2.60	2.34
6CL8A	2.45	2.21
6CM3	2.63	2.36
6CM6	2.13	1.91
6CM7	2.28	2.05
6CM8	2.23	2.00
6CN7	2.45	2.21
6CQ4	2.28	2.05
6CQ8	2.53	2.27
6CS6	2.25	2.03
6CS7	2.08	1.87
6CU5	2.20	1.98
6CU6	2.95	2.66
6CU8	2.53	2.27
6CW4	3.10	2.79
6CW5	1.38	1.24
6CX8	2.80	2.52
6CY5	2.68	2.51
6CY7	1.68	1.51
6CZ5	2.60	2.34
6D10	2.55	2.30
6DA4	2.03	1.82
6DB5	2.50	2.25
6DC6	2.13	1.91
6DE4	2.28	2.05
6DE6	1.80	1.62
6DE7	2.45	2.21
6DG6GT	2.30	2.07
6DHH12	1.88	1.69
6DHH13	3.65	3.29
6DJ8	2.48	2.23
6DK3	2.33	2.09
6DK6	1.95	1.76
6DL3	2.85	2.57
6DL4	3.98	3.58
6DL5	1.63	1.46
6DM4A	2.03	1.82
6DN3	1.90	1.71
6DN6	3.50	3.15
6DN7	2.53	2.27
6DQ5	4.38	3.94
6DQ6B	2.93	2.63
6DR7	2.78	2.50
6DS4	2.95	2.66
6DS5	1.83	1.64
6DT5	1.95	1.76
6DT6A	1.78	1.60
6DT8	2.05	1.85
6DV4	3.55	3.20
6DW4B	2.05	1.85
6DX8	1.45	1.31
6DZ4	2.68	2.41
6DZ7	5.18	4.66
6E5	3.10	2.79
6EA4	4.30	3.87
6EA5	2.68	2.41
6EA7	3.08	2.77
6EA8	2.15	1.94
6EB8	3.10	2.79
6EC4A	2.38	2.14
6EH4A	4.30	3.87
6EH5	1.95	1.76
6EH7	2.10	1.89
6EH8	1.93	1.73
6EJ4A	5.15	4.64
6EJ7	1.95	1.76
6EL4	4.08	3.67
6EM5	2.45	2.21
6EM7	3.08	2.77
6EN4	4.63	4.16
6EQ7	1.63	1.46
6ER5	2.33	2.09
6ES5	1.58	1.42
6ES8	2.73	2.45
6EU7	2.18	1.96
6EU8	2.03	1.82
6EV5	2.35	2.12
6EV7	1.63	1.46
6EW6	1.95	1.76
6EW7	3.58	3.22
6EZ5	2.78	2.50
6EZ8	1.95	1.76
6F5	3.23	2.90
6F6	3.35	3.02
6F6GT	3.20	2.88
6F8G	4.23	3.80
6FA7	1.48	1.33
6FD7	3.10	2.79
6FG5	2.68	2.41
6FG6	1.83	1.64
6FG7	2.53	2.27
6FH5	2.75	2.48
6FH8	2.43	2.18
6FJ7	2.28	2.05
6FM7	2.53	2.27
6FM8	2.08	1.87

Type No.	Net 1-9	10-49
6FQ5A	$2.53	$2.27
6FQ7	1.63	1.46
6FS5	2.28	2.05
6FV6	2.45	2.28
6FV8A	2.85	2.57
6FW5	2.68	2.41
6FY5	1.38	1.24
6FY7	1.93	1.73
6G11	3.15	2.84
6GB3A	2.95	2.66
6GB5	2.05	1.87
6GC5	3.10	2.79
6GE5	3.15	2.84
6GF5	2.08	1.87
6GF7A	2.90	2.61
6GH8A	1.75	1.58
6GJ5A	3.33	2.99
6GJ7	1.70	1.53
6GK5	2.53	2.27
6GK6	2.03	1.82
6GK17	2.65	2.39
6GL7	2.90	2.61
6GM5	1.53	1.37
6GM6	2.13	1.91
6GM8	2.48	2.23
6GN8	3.10	2.79
6GQ7	1.88	1.69
6GS7	1.93	1.73
6GT5A	3.48	3.13
6GU5	2.25	2.03
6GU7	2.28	2.05
6GV5	2.25	2.03
6GV8	2.30	2.07
6GW6	2.93	2.63
6GW8	1.53	1.37
6GX6	1.88	1.69
6GX7	2.95	2.66
6GY5	2.53	2.27
6GY6	1.88	1.69
6GY8	2.58	2.32
6GZ5	1.48	1.33
6H6	3.03	2.72
6HA5	2.10	1.89
6HA6	2.45	2.21
6HB5	2.53	2.27
6HB6	2.45	2.21
6HB7	2.38	2.14
6HD7	1.80	1.62
6HE5	2.78	2.50
6H5	4.80	4.32
6HF8	3.25	2.93
6HG5	1.85	1.67
6HG8	1.85	1.67
6HJ8	1.55	1.40
6HK5	1.95	1.76
6HL8	1.68	1.51
6HM5	2.10	1.89
6HM6	1.48	1.33
6HQ5	2.78	2.50
6HR5	1.28	1.15
6HR6	2.03	1.82
6HS5	4.25	3.83
6HS6	2.03	1.82
6HS8	2.60	2.34
6HT6	1.43	1.28
6HU6	2.43	2.18
6HU8	3.08	2.77
6HV5A	5.13	4.62
6HZ5	3.88	3.49
6HZ6	1.75	1.58
6J5	2.53	2.27
6J6A	2.45	2.21
6J7	3.48	3.13
6J10	3.33	2.99
6J11	2.88	2.59
6JA8	2.00	1.80
6JB5	2.60	2.34
6JB6A	3.50	3.15
6JC6A	1.83	1.64
6JC8	1.83	1.64
6JD6	2.53	2.27
6JE6A	4.83	4.34
6JE8	2.03	1.82
6JF6	3.98	3.58
6JG5	1.60	1.44
6JG6A	3.58	3.22
6JH5	3.95	3.56
6JH6	1.95	1.76
6JH8	2.95	2.66
6JK6	2.10	1.89
6JK8	2.03	1.82
6JM6A	3.15	2.84
6JN6	2.93	2.63
6JN8	2.00	1.80
6JQ6	2.13	1.91
6JR6	3.18	2.86
6JS6C	4.05	3.65
6JT6A	3.23	2.90
6JT8	2.45	2.21
6JU6	3.83	3.44
6JU8A	2.43	2.18
6JV8	2.43	2.18
6JW8	1.70	1.53
6JZ6	2.55	2.30
6JZ8	1.93	1.73
6K6GT	2.20	1.98
6K7	3.00	2.70
6K11	2.08	1.87
6KA8	2.68	2.41
6KD6	4.88	4.39

RECEIVING TUBES

Type No.	Net 1-9	10-49
6KD8	$2.13	$1.91
6KE8	3.33	2.99
6KG6A	4.80	4.32
6KM6	4.88	4.39
6KM8	1.73	1.55
6KN6	3.98	3.58
6KN8	3.85	3.47
6KR8	2.13	1.91
6KS6	2.48	2.23
6KT6	2.68	2.41
6KT8	2.95	2.66
6KU8	2.40	2.16
6KV6A	4.00	3.60
6KV8	3.23	2.90
6KY8A	4.08	3.67
6KZ8	2.25	2.03
6L6	5.60	5.04
6L6GC	3.33	2.99
6L7	3.48	3.13
6LB6	4.65	4.19
6LB8	2.58	2.32
6LC8	2.60	2.34
6LE8	3.05	2.75
6LF6	4.63	4.16
6LF8	2.83	2.54
6LH6A	4.43	3.98
6LJ6	4.43	3.98
6LJ6A	4.43	3.98
6LJ8	2.40	2.16
6LM8	2.68	2.41
6LN8	1.33	1.19
6LQ6	4.83	4.34
6LQ8	3.03	2.72
6LR6	4.43	3.98
6LR8	2.63	2.36
6LT8	2.20	1.98
6LU8	2.63	2.36
5LX8	1.30	1.17
6LY8	2.13	1.91
6M11	3.18	2.86
6MB8	2.00	1.80
6MD8	2.90	2.61
6ME8	5.05	4.55
6MF8	2.63	2.36
6MG8	1.35	1.22
6MHH3	2.45	2.21
6MJ8	2.53	2.27
6MK8A	2.35	2.12
6MN8	2.65	2.39
6MQ8	2.08	1.87
6MU8	2.85	2.57
6MV8	2.70	2.43
6N7	2.78	2.50
6N7GT	3.25	2.93
6Q7	2.95	2.66
6Q11	2.08	1.87
6RHH2	2.68	2.41
6RK19	2.33	2.09
6RP22	4.98	4.48
6S4A	2.03	1.82
6S8GT	2.08	1.87
6SA7	2.75	2.48
6SA7GT	2.20	1.98
6SB7Y	2.98	2.68
6SC7	2.95	2.66
6SF5	2.75	2.48
6SF7	3.15	2.84
6SG7	3.08	2.77
6SH7	3.40	3.06
6SJ7	2.93	2.63
6SK7	2.73	2.45
6SK7GT	2.73	2.45
6SL7GT	2.70	2.43
6SN7GTB	2.20	1.98
6SQ7	2.70	2.43
6SR7	2.45	2.21
6T4	2.58	2.23
6T8A	2.58	2.23
6T9	2.20	1.98
6T10	2.95	2.66
6U5	3.70	3.33
6U8A	2.13	1.91
6U9	1.45	1.31
6U10	2.23	2.00
6V3A	2.28	2.05
6V6	3.70	3.33
6V6GTA	2.45	2.21
6W4GT	1.80	1.62
6W6GT	2.53	2.27
6X4	1.88	1.69
6X5GT	1.98	1.78
6X8A	2.45	2.21
6X9	1.63	1.46
6Y6GA	2.73	2.45
6Y6GT	2.73	2.45
6Y9	1.68	1.51
6Z10	3.33	2.99
7AG7	3.95	3.56
7AU7	1.70	1.53
7C5	2.35	2.12
7EY6	2.03	1.82
7F7	4.13	3.71
7GS7	2.28	2.05
7GV7	2.15	1.94
7HG8	1.53	1.37
7KY6	2.35	2.12
7MP18	2.65	2.39
7N7	3.90	3.51
8A8	1.45	1.31
8AC10	2.78	2.50

Type No.	Net 1-9	10-49
8AL9	$4.08	$3.67
8AR11	2.68	2.41
8AU8	1.93	1.73
8AW8A	2.93	2 63
8B8	3.00	2.70
8B10	2.40	2.16
8BA11	3.00	2.70
8BM11	2.58	2.32
8BN11	2.18	1.96
8BQ5	2.05	1.85
8BQ11	2.38	2.14
8BU11	2.73	2.45
8CB11	2.80	2.52
8CG7	1.63	1.46
8CM7	1.35	1.22
8CS7	2.18	1.96
8CW5	1.38	1.24
8CX8	2.20	1.98
8EB8	2.28	2.05
8EM5	2.25	2.03
8ET7	2.08	1.87
8FQ7	1.63	1.46
8GJ7	1.58	1.42
8GN8	2.28	2.05
8GU7	1.75	1.58
8JU8A	1.85	1.67
8JV8	2.35	2.12
8KA8	2.55	2.30
8KR8	3.10	2.79
8LC8	2.63	2.36
8LT8	2.20	1.98
9A8	1.45	1.31
9AH9	2.53	2.27
9AK10	2.78	2.50
9AM10	2.73	2.45
9AQ8	3.58	3.22
9AU7	1.63	1.46
9BJ11	2.93	2.63
9GH8A	2.25	2.03
9GV8	1.88	1.69
9JW8	1.95	1.76
9KC6	2.18	1.96
9KX6	2.28	2.05
9KZ8	1.63	1.46
9MHH3	2.08	1.87
9MP12	2.15	1.94
9RA6	3.83	3.44
9RAL1	2.70	2.43
9U8A	1.70	1.53
10AL11	2.28	2.05
10BQ5	1.38	1.24
10C8	3.03	2.72
10CW5	1.38	1.24
10DE7	2.70	2.43
10DR7	2.23	2.00
10DX8	1.50	1.30
10EG7	2.40	2.16
10EM7	2.68	2.41
10EW7	2.90	2.61
10GF7A	3.00	2.70
10GK6	2.45	2.21
10GN8	2.68	2.41
10GV8	1.95	1.76
10HF8	2.95	2.66
10JA5	2.68	2.41
10JA8	2;28	2.05
10JT8	2;60	2.34
10JY8	2.00	1.80
10KR8	2.35	2.12
10KU8	2.68	2.41
10LB8	2.58	2.32
10LE8	3.25	2.93
10LW8	2.90	2.61
10LZ8	2.28	2.05
10T10	2.93	2.63
10Z10	3.08	2.77
11AF9	1.70	1.53
11AR11	2.93	2.63
11BM8	2.88	2.59
11BQ11	2.93	2.63
11BT11	3.58	3.22
11CA11	3.75	3.38
11CF11	4.28	3.85
11CH11	3.63	3.26
11DS5	2.53	2.27
11FY7	2.03	1.82
11HM7	3.23	2.90
11JE8	2.10	1.89
11KV8	3.58	3.22
11LQ8	3.25	2.93
11LT8	2.13	1.92
11MS8	2.35	2.12
11LY9	1.85	1.67
12AB5	2.13	1.91
12AC10A	2.53	2.27
12AD6	1.93	1.73
12AE6A	1.70	1.53
12AE10	3.15	2.84
12AF3	2.13	1.91
12AF6	1.58	1.42
12AL5	1.50	1.35
12AL11	3.10	2.79
12AQ5	1.93	1.73
12AT6	1.53	1.37
12AT7	1.88	1.69
12AU6	1.93	1.73
12AU7A	1.68	1.51
12AV5GA	3.00	2.70
12AV6	1.28	1.15
12AV7	2.53	2.27

Type No.	Net 1-9	10-49
12AX3	$1.65	$1.49
12AX4ZTB	1.83	1.64
12AX7A	1.53	1.37
12AY3A	1.60	1.44
12AY7	3.23	2.90
12AZ7A	2.20	1.98
12B4A	2.20	1.98
12BA6	1.55	1.40
12BA7	2.95	2.66
12BB14	5.25	4.73
12BD6	1.15	1.04
12BE3	1.88	1.69
12BE6	1.68	1.51
12BF6	1.18	1.06
12BF11	3.18	2.86
12BH7A	2.13	1.91
12BK5	1.88	1.69
12BL6	2.03	1.82
12BQ6GTB	2.10	1.89
12BR3	2.13	1.91
12BR7	1.68	1.51
12BS3A	2.03	1.82
12BT3	1.73	1.55
12BV7	1.95	1.76
12BV11	2.65	2.39
12BW4	1.83	1.64
12BY7A	1.95	1.76
12BZ6	1.30	1.17
12BZ7	2.08	1.87
12C5	2.38	2.14
12CA5	2.18	1.96
12CL3	1.93	1.73
12CR6	1.48	1.33
12CT3	1.80	1.62
12CU5	2.38	2.14
12CU6	2.10	1.89
12D4	1.68	1.51
12DB5	1.45	1.31
12DQ6B	2.83	2.54
12DQ7	1.95	1.76
12DS7	2.95	2.66
12DT5	1.70	1.53
12DT8	1.95	1.76
12DW4A	2.03	1.82
12DW7	1.68	1.51
12DZ6	2.00	1.80
12EK6	1.95	1.76
12EN6	1.70	1.53
12F8	1.80	1.62
12FQ7	1.85	1.67
12FQ8	2.85	2.57
12FV7	1.70	1.53
12FX5	1.80	1.62
12FX8A	1.93	1.73
12GB3	2.10	1.89
12GB6	2.83	2.54
12GB7	2.83	2.54
12GC6	2.38	2.14
12GE5	2.85	2.57
12GN7A	3.03	2.72
12GT5	2.93	2.63
12GW6	2.83	2.54
12H6	2.45	2.21
12HE7	3.75	3.38
12HG7	3.03	2.72
12HL7	2.68	2.41
12J5GT	2.40	2.16
12JB6A	3.48	3.13
12JN6	2.13	1.91
12JQ6	2.23	2.00
12JT6A	2.73	2.45
12K5	1.73	1.55
12L6GT	1.95	1.76
12MD8	2.68	2.41
12R5	1.68	1.51
12RK19	2.13	1.91
12SA7	2.75	2.48
12SG7	2.58	2.32
12SJ7	2.35	2.12
12SK7	2.90	2.61
12SL7GT	2.73	2.45
12SN7GTA	2.35	2.12
12SQ7	2.70	2.43
12T10	3.25	2.93
12V6GT	2.45	2.21
12W6GT	2.68	2.41
12X4	1.23	1.10
13CW4	2.78	2.50
13DE7	2.63	2.36
13DR7	3.15	2.84
13EM7	3.35	3.02
13FD7	2.90	2.61
13FM7	2.20	1.98
13GB5	2.18	1.96
13GF7A	2.85	2.57
13J10	3.43	3.08
13JZ8	2.78	2.50
13V10	3.25	2.93
13Z10	3.43	3.08
14BL11	4.00	3.60
14BR11	3.18	2.86
14GT8	1.90	1.71
14JG8	2.00	1.80
15AF11	2.63	2.36
15BD11A	3.00	2.70
15CW5	1.35	1.22
15DQ8	1.88	1.69
15EA7	3.35	3.02
15FM7	2.20	1.98
15FY7	2.03	1.82

Type No.	Net 1-9	10-49
15KY8A	$3.48	$3.13
15LE8	3.83	3.44
15MF8	2.55	2.30
16A8	1.90	1.71
16AK9	3.75	3.38
16AQ3	1.48	1.33
16BQ11	2.68	2.41
16BX11	3.10	2.79
16CB28	5.26	4.38
16GK6	1.68	1.51
16GY5	2.65	2.39
16KA6	3.13	2.81
16LU8A	3.98	3.58
17AB10	3.00	2.70
17AX3	1.43	1.28
17AX4GTA	1.95	1.76
17AY3A	2.03	1.82
17BB14	4.90	4.41
17BE3	2.03	1.82
17BF11	3.25	2.93
17BH3	1.43	1.28
17BR3	1.85	1.67
17BS3A	2.03	1.82
17BW3	1.60	1.44
17BZ3	2.03	1.82
17C5	1.70	1.53
17C9	3.93	3.53
17CK3	1.95	1.76
17CT3	1.63	1.46
17CU5	1.70	1.53
17D4	2.23	2.00
17DE4	2.00	1.80
17DM4A	2.23	2.00
17DQ6B	3.03	2.72
17DW4A	2.03	1.82
17EW8	1.50	1.35
17GB3	2.60	2.34
17GE5	2.38	2.14
17GJ5A	3.33	2.99
17GT5A	3.03	2.72
17GV5	2.30	2.07
17GW6	3.03	2.72
17HB25	3.83	3.44
17JB6A	3.23	2.90
17JF6	3.70	3.33
17JG6A	3.60	3.24
17JM6A	3.25	2.93
17JN6	2.90	2.61
17JQ6	2.60	2.34
17JT6A	3.08	2.77
17JZ8	1.95	1.76
17KV6A	4.73	4.25
17LD8	3.48	3.13
17RK19	1.43	1.28
17X10	3.00	2.70
17Z3	2.20	1.98
18A5	2.60	2.34
18AJ10	2.95	2.66
18FW6A	1.35	1.22
18FX6A	1.63	1.46
18FY6A	1.63	1.46
18GB5	2.83	2.54
18GD6A	1.63	1.46
18GV8	2.58	2.32
19AU4GTA	2.38	2.14
19CG3	2.00	1.80
19CL8A	1.75	1.58
19DE3	2.35	2.12
19EA8	2.45	2.21
19EZ8	2.25	2.03
19FX5	2.23	2.00
19HR6	1.23	1.10
19HV8	2.58	2.32
19J6	1.85	1.67
19JN8	1.75	1.58
19MR9	1.63	1.46
19T8	2.68	2.41
19X8	2.35	2.12
20AQ3	1.80	1.62
20EZ7	1.88	1.69
20LF6	4.68	4.21
21GY5	2.53	2.27
21HB5A	2.63	2.36
21JS6A	6.23	5.60
21JV6	2.55	2.30
21JZ6	2.68	2.41
21KA6	2.45	2.21
21KQ6	6.38	5.74
21LG6A	4.48	4.03
21LR8	2.50	2.25
21LU8	2.50	2.25
22BH3A	1.70	1.53
22BW3	2.23	2.00
22DE4	2.30	2.07
22JF6	3.85	3.47
22JG6A	3.73	3.35
22JR6	3.75	3.38
22JU6	3.75	3.38
22KM6	4.43	3.98
22KV6A	3.93	3.53
23JS6A	6.23	5.60
23Z9	2.60	2.34
24BF11	2.85	2.57
24JE6A	4.63	4.16
24JZ8	2.38	2.14
24LQ6	4.63	4.16
25AV5GA	3.23	2.90
25AX4GT	1.53	1.37
25BD14	5.25	4.73
25BQ6GTB	2.20	1.98

Type No.	Net 1-9	10-49
25C5	$2.03	$1.82
25CD6GB	3.53	3.17
25CG3	1.85	1.67
25CK3	1.70	1.53
25CT3	1.48	1.33
25CU6	2.20	1.98
25DL3	3.15	2.84
25DN6	3.63	3.26
25E5	3.65	3.29
25EC6	3.48	3.13
25EH5	2.03	1.82
25F5A	2.10	1.89
25HX5	2.98	2.68
25JZ8	2.90	2.61
25L6GT	2.03	1.82
25W4GT	1.85	1.67
25W6GT	2.03	1.82
25Z6GT	2.13	1.91
26HU5	6.03	5.42
26LW6	5.20	4.68
26LX6	4.95	4.46
27GB5	2.03	1.82
29KQ6	5.88	5.29
29LE6	2.95	2.66
30AE3	1.80	1.62
30AG11	3.23	2.90
30JZ6	3.08	2.77
30KD6	4.05	3.65
30MB6	4.23	3.80
31AL10	3.48	3.13
31JS6C	3.95	3.56
31LQ6	4.40	3.96
31LR8	5.03	4.52
31LZ6	4.88	4.39
32ET5A	1.33	1.19
32HQ7	4.25	3.83
33GT7	3.70	3.33
33GY7A	3.50	3.15
33JR6	3.43	3.08
33JV6	2.33	2.09
34CE3	2.15	1.94
34GD5A	1.63	1.46
34R3	1.88	1.69
35B5	1.60	1.44
35C5	1.75	1.58
35EH5	1.88	1.69
35L6GT	2.13	1.91
35LR6	4.43	3.98
35W4	1.10	.99
35Y4	2.48	2.23
35Z5GT	1.85	1.67
36AM3B	1.38	1.24
36KD6	4.85	4.37
36MC6	4.95	4.46
38HE7	4.00	3.60
38HK7	3.90	3.51
40KD6	4.85	4.37
40KG6A	5.03	4.52
42	2.43	2.18
42EC4A	2.05	2.21
42KN6	3.98	3.58
45B5	1.53	1.37
50A5	2.93	2.63
50B5	1.63	1.46
50BM8	2.18	1.96
50C5	1.68	1.51
50DC4	1.30	1.17
50EH5	1.95	1.76
50GY7A	5.43	4.88
50HC6	2.08	1.87
50HK6	1.18	1.06
50JY6	3.50	3.15
50L6GT	2.45	2.21
50Y6GT	2.48	2.23
53HK7	4.60	4.14
60FX5	1.63	1.46
75	3.46	3.20
80	2.65	2.39
83	2.75	2.48
117N7GT	6.43	5.78
117Z3	2.48	2.23
5879	2.93	2.63
6973	2.78	2.50
7025	1.55	1.40
7027A	4.08	3.67
7056	1.23	1.10
7167	1,93	1.73
7189	2.33	2.09
7199	3.10	2.79
7247	2.23	2.00
7355	2.00	1.80
7408	1.60	1.44
7543	1.63	1.46
7581A	3.38	3.04
7591A	1.53	1.37
7695	2.43	2.18
7868	3.10	2.79
8136	1.65	1.49
8417	3.10	2.79
8425A	1.63	1.46
8426A	1.93	1.73
EM84	1.83	1.64

SPECIAL PURPOSE TUBES

RCA
Eimac
Amperex
GTE
RAYTHEON
ELECTRONS INCORPORATED
Mullard
NATIONAL

BY THE NATION'S LEADING MANUFACTURERS

TUBE MANUFACTURERS

Amperex

Eimac
Electrons Inc.
Mullard
Machlett
National Electronics

Radio Corp. of America
Raytheon
Sylvania
Thermosen

Westinghouse
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FOR USE IN BROADCASTING, INDUSTRY & RESEARCH

The list of Special Purpose Tubes on this and the following pages was compiled from the tubes made by the Nation's Leading Manufacturers shown above. It includes types for practically every known application in Radio and TV Broadcasting, Industrial Electronics, Research and Development. New types are being added constantly to our stock, so if you don't see the type you require, write for price and delivery.

Type	Net Each
OA2	$1.58
OA2WA	3.72
OA3/VR75	1.89
OA3A	1.74
OA4	2.51
OB2	1.75
OB2WA	2.94
OB3	2.80
OC2	1.95
OC3/VR105	1.81
OC3A	1.83
OD3/VR150	1.81
OD3A	1.83
OE3	8.00
OG3	3.00
1AD4	4.37
C1A	14.80
C1B	17.80
C1BA/5664	19.50
C1JA/6014/5683/CIK	11.80
C1K/6014/5683	12.30
1C/3B22	10.85
1C21	5.70
1EP1	35.00
1EP2	14.00
1EP11	35.70
1L4	1.67
1P21	58.80
1P22	26.65
1P28	26.15
1P28/V1	36.15
1P28A	32.45
1P28A/V1	50.40
1P29	12.05
1P31	9.04
1P32	4.90
1P37	9.60
1P39	5.00
1P40	8.05
1P41	9.65
1P42	23.10
2-01C	22.00
2-25A	41.00
2-50A	48.00
2-150D	68.50
2-240A	68.50
2-450A	200.00
2-2000A	330.00
2AP1A	27.65
2BP1	19.10
2BP11	12.40
2C39A	20.75
2C39A/V1	28.00
2C39WA	28.00
2C39WA/C	20.75
2C39WA/G	28.00
2C41	32.00
2C43	29.00
2D21	1.64
2D21W/5727	3.25
2E24	9.40
2E26	5.40
2F21	335.00
2G21	10.70
2G22	10.70
2J42	140.00
2J50	305.00
2J5/A	880.00
2J55	$400.00
2J70A	500.00
2J70B	500.00
2K22	95.00
2K25	43.00
2K26	70.00
2K28	100.00
2K28A/6133	100.00
2K29	125.00
2K45	205.00
2K56	120.00
2X2A	5.55
2X1000A	210.00
3A4	2.58
3A5	2.79
3AP1A	50.40
3AQP1	34.35
3B/610/7723	14.80
3B4WA	6.33
3B22/1C	10.85
3B24WB	13.45
3B28	10.55
3BP1A	38.50
3C/4B24	13.25
3C/L	23.55
3C23	13.20
3C24	27.50
3C45 use 6130	
3CNP105A	25.50
3CV1500A7	225.00
3CV30,000A1	710.00
3CV30,000A3	590.00
3CV30,000H3	620.00
3CW5000A1/8240	298.00
3CW5000A3/8242	250.00
3CW5000F1/8241	270.00
3CW5000F3/8243	260.00
3CW5000H3	265.00
3CW10,000H3	445.00
3CW20,000A1	615.00
3CW20,000A3	515.00
3CW20,000A7	820.00
3CW20,000H3	540.00
3CW25,000A3	565.00
3CW30,000H3	595.00
3CW40,000H3	795.00
3CX100A5	22.00
3CX100F5/8250	114.00
3CX1000A7/8283	175.00
3CX1500A7/8877	200.00
3CX2500A3/8161	206.00
3CX2500F3/8251	211.00
3CX2500H3	240.00
3CX3000A1/8238	241.00
3CX3000A7	286.00
3CX3000F1/8239	246.00
3CX3000F7/8162	295.00
3CX5000A3	356.00
3CX5000H3	440.00
3CX10,000A1/8158	545.00
3CX10,000A7/8160	580.00
3CX10,000H3	545.00
3CX15,000A3	560.00
3CX15,000A7	610.00
3CX15,000H3	560.00
3CX20,000A3	580.00
3CX20,000H3	580.00
3D22A	48.00
3E29	$25.55
C3J/5632	13.65
C3J/A/5684	14.05
3CJ/L	17.95
3JP7	35.00
3KP1	37.10
3KP7	14.00
3KP11	14.00
3RP1	22.40
3RP1A	39.90
3RP7A	42.70
3WP1	46.20
3WP11	46.90
3-400Z/8163	37.00
3-500Z	37.00
3-1000Z/8164	88.00
4B24/3C	13.25
4B32	15.50
4CN15A	60.50
4CPX250K/8590	75.00
4CS250H	84.00
4CS250HA	61.00
4CS250R	63.50
4CV1500B	240.00
4CV8000A	515.00
4CV20,000A	590.00
4CV35,000A	910.00
4CV50,000E	1900.00
4CV50,000J	1900.00
4CV75,000A	2230.00
4CV100,000C/8351	2520.00
4CV250,000A	6350.00
4CV250,000V	6450.00
4CW800B	331.00
4CW800F	331.00
4CW2000A/8244	240.00
4CW10,000A/8661	560.00
4CW25,000A	825.00
4CW50,000E	1900.00
4CW50,000J	1900.00
4CW100,000D	2520.00
4CW100,000E	2880.00
4CW250,000A	6350.00
4CW250,000	6450.00
4CX125C	61.50
4CX125F	123.50
4CX250B/7203	35.60
4CX250F/7204	38.00
4CX250FG/8621	38.00
4CX250K/8245	70.00
4CX250M/8246	135.00
4CX250R/7580W	44.50
4CX300A/8167	60.00
4CX300Y/8561	105.00
4CX350A/8321	48.50
4CX350F/8322	51.50
4CX350FJ/8904	60.00
4CX600B	319.00
4CX600F	319.00
4CX600J/8809	180.00
4CX600JA	206.00
4CX1000A/8168	200.00
4CX1000K/8352	230.00
4CX1500A	215.00
4CX1500B/8660	205.00
4CX3000A/8169	420.00
4CX5000A/8170	495.00
4CX5000J/8909	545.00
4CX5000R/8170W	$705.00
4CX10,000D/8171	575.00
4CX10,000J	590.00
4CX15,000A/8281	695.00
4CX15,000/8910	765.00
4CX35,000C/8349	1905.00
4D21A/4-125A	54.00
4D22	88.50
4D32	88.50
4E27A/5-125B	50.00
4J31	600.00
4J32	600.00
4J33	600.00
4J34	600.00
4J35	600.00
4PR60C/8252W	116.00
4PR65A/8187	50.00
4PR125A/8247	57.00
4PR250C/8248	230.00
4PR400/8188	64.00
4PR1000A/8289	215.00
4PR1000B	225.00
4W300B/8249	71.00
4W20,000A/8173	3400.00
4X150A/7034	23.15
4X150D/7035	29.00
4X150G/8172	68.50
4X500A	127.50
4-65A/8165	32.50
4-125A/4D21	55.00
4-250A/5D22	50.00
4-400A/8438	53.50
4-400C/6775	60.00
4-500A	65.00
4-1000A/8166	135.00
5ABP1	59.50
5ABP7	53.90
5ABP11	21.00
5ABP31	47.60
5ADP1	59.50
5ADP31	55.30
5AUP24	155.00
5AZP4	150.00
5AX51	11.45
5BP1A	49.00
5C21/C6J/5685	28.00
5CP1A	50.40
5CP11A	50.40
5CX1500A	195.00
5CX3000A	437.00
5D22 use 4-250A	
5FP4A	36.05
5FP7A	50.40
5R4GYB	2.60
5R4WGA	10.55
5R4WGB	15.50
5UP1	21.70
5UP7	36.40
5UP31	30.80
5Y3WGT use 6087	
5ZP16	135.00
5-125B use 4E27A	
5-500A	71.00
6AC7W	5.84
6AG5WA use 6186	
6AG7Y	3.60
6AH6WA	8.25
6AKSW/5654	2.70

SPECIAL PURPOSE TUBES CONT.

Type	Net Each
6AK6	$1.68
6AL5 use 6663	
6AL5W use 5726	
6AW5	4.56
6AN5WA	11.25
6AQ5 use 6669	
6AQ5W use 6005	
6AR6	6.00
6AS6	4.14
6AS6W use 5725	
6AS7G	5.67
6AS7GA	5.38
6AU6WB	3.56
6B	29.85
6B/L	30.85
6BA6W use 5749	
6BE6W use 5750	
6BL6	100.00
6BM6A	100.00
C6C	68.00
6C/670A	22.40
6C21	121.00
C6H-1	29.10
6CY5 use 7717	
604	3.66
6DJ8/ECC88	2.42
6F	30.85
6F4	15.68
C6H-1	33.60
C6H-2	33.20
C6H-3	30.25
C6J/5C22	28.10
C6J/A/5685	31.00
C6J/F/6860	35.00
C6J/K/C6H-1	29.10
C6J/KF/C6H-2	30.25
C6J/L/7321	31.50
6J4	4.95
6JW4A use 8532	
6J6WA	5.99
6SJ7Y	2.82
6X4W	2.87
7AK7	8.15
7AX51	13.55
7BP7A	35.45
7C24/5762	300.00
7MP7	65.80
7NP4	1165.00
7TP4	80.00
7VP1	35.00
7VP31	35.40
7WP4	1165.00
8HP4	63.00
8NP4	59.50
8QP4	63.00
9C25	2995.00
10SP4	103.50
12A6	4.55
12AT7WA	3.15
12AT7WB	3.32
12AT7WC	3.10
12AX7A use 6681	
12AY7	2.45
12SW7	2.23
12SY7	2.45
12SW7	2.23
12SY7	3.64
14GT8 use 7724	
C16J/5665	52.50
FG/7/5557	9.50
KY21A	43.00
RX21A	43.00
21EYP4	49.50
2ST	43.00
26A6	4.23
26A7GT	8.04
26C6	3.27
26D6	3.70
FG32/5558	17.50
33/5720	41.00
35T	47.00
FG57/5559	23.00
58AVP	695.00
75TH	43.00
75TL	43.00
E80CC/6085	7.80
E80CF/7643	13.45
83	2.56
85A1/OE3	8.00
85A2/OG3	3.00
E88CC/6922	5.95
90WB3	$32.00
FG95/632B	35.00
100/5575/616	225.00
100TH	32.00
100TL	32.00
102A/23102	192.00
103	128.00
104/5561	62.00
105	59.00
121	128.00
141	128.00
142	98.00
152TH	93.00
152TL	125.00
175A	87.00
177WA	52.25
E180F/6688	8.20
199/8094	375.00
200/5576	255.00
200NB	65.00
207	398.00
VA218	220.00
VA218B	210.00
238B/5555	389.75
239B/5555/653B	335.00
250R	42.00
250TH	45.00
250TL	45.00
253	57.00
254W	46.00
258A/5553B/655	265.00
258B/5553B/655	265.00
259B/5554/679	213.00
264/8576	420.00
284	217.00
290	470.00
290A	480.00
304TH	83.00
304TL	83.00
322	26.00
323B	14.00
332/456	380.00
356/5771	735.00
357B	795.00
QKK381	125.00
393A	14.00
399	90.50
QKK404/7158	85.00
404A use 5847	
408A	5.84
414	390.00
415/5550/681	53.75
417A use 5842	
450TH	103.00
450TL	103.00
QKH456/7040	815.00
456/332	380.00
466R/6697	1398.00
481B	14.00
502A/2050A	2.40
CK510AX	7.50
CK512AX	6.00
CK526AX	10.05
QKK531	85.00
QKK532	85.00
CK533AX	6.00
CK534AX	6.00
QKK549	85.00
572B/T160L	18.00
575A	25.50
579B	21.90
CK587	20.25
592/3-200A3	63.00
600/3B22/1C	10.85
604/6014	15.00
604L/7015	16.40
600/7016	24.05
606L/7017	26.20
610/7723	12.50
KU610	39.00
614 use 610/7723	
615/7018	11.50
616	13.25
616/5575/100	225.00
617	17.00
618 use 660	
618L use 660L/7786	
619	11.30
623	16.70
QKK623	85.00
624	85.50
627	$44.00
CK628 use 6247	
629	68.00
632B	35.50
632C	35.00
635/7019	15.00
635L	15.70
635P	17.30
KX642	19.00
643	14.85
649/5834	13.60
651/5552A	110.00
652/5551A	71.00
653/5835	19.50
653/5555	336.00
653B/5555	340.00
655/5553B	265.00
660	17.50
660L/7786	18.85
664L	34.50
664P	42.50
670A/6C	22.40
672A	43.00
673	22.75
676	66.75
677	66.75
678	52.00
679/5554	213.00
681/5550	53.75
682/5550/681	53.75
686/5550/681	53.75
688	1540.00
710/7307/6011	13.15
710L/7509	15.20
714/7021	11.00
715 use 5557	
715C	73.50
716/6855	12.50
725A	380.00
RK726C	115.00
QKH729	600.00
QKH730	600.00
QKH731	600.00
QKH732	600.00
QKH733	600.00
734/5544	27.00
734L	29.00
740/6856	24.25
740L/7022	25.00
740P/6857	25.00
750TL	248.00
QKK752	85.00
QKK753	85.00
QKK754A	490.00
QKK755A	490.00
QKK746A	490.00
QKK758A	490.00
QKK759A	490.00
759	57.00
760/6858	28.10
760L/7023	29.40
760P/6859	29.80
762	23.90
765	34.35
765A	34.35
770L	52.20
770P	57.10
780	98.60
Z803U/6779	4.15
807	6.05
810	40.00
811A	9.25
812A	7.60
813	28.45
814	28.35
815	35.70
816	5.20
QKK822	265.00
QKK826	265.00
826	46.00
827R	755.00
828	40.60
829B	22.00
832A	18.90
QKK833A	780.00
833A	75.90
834	
836	15.75
837B	249.00
845	38.70
857B	239.50
QKK860	$160.00
866A	5.05
866AX	14.75
868	8.90
QKK869	265.00
869B	142.00
869BL	142.00
872A	13.25
872AX	35.00
QKK877	475.00
QKK878	800.00
880	660.00
884	3.72
889A	288.00
889RA	395.00
891	360.00
891R	485.00
892	305.00
892R	460.00
893A	1585.00
893AR	2450.00
895	2520.00
902A	28.00
QKK910	490.00
917	12.70
918	8.75
919	14.55
920	17.95
921	7.85
922	5.50
923	7.10
925 use 2022	
926	7.10
927	10.40
929	6.00
930	7.25
931A	14.90
931VA	15.50
934	9.80
935	17.05
955	7.05
959	13.85
QKK965	490.00
QKK966	490.00
QKK967	490.00
QKK968	490.00
QKK978	925.00
991	2.32
1000T	260.00
1001	60.00
1005A	107.00
1009A	169.00
1009AP	173.00
1011A	71.00
1011AP	72.20
1012A	107.00
1012AP	109.00
1013A	300.00
1014A	840.00
1016A	170.00
1016AP	173.00
QKK1022	370.00
1022A	125.00
1022AP	127.50
1027 use 6174	
1031A	60.00
1032	107.00
1036	78.00
1037	140.00
1038	345.00
1039	139.00
1040	1075.00
CK1047	6.15
1051A (use 5551A/652)	71.00
1051AP	73.00
1052A (use 5552A/651)	107.00
1052AP	110.00
1053A	300.00
1054A	840.00
1059A	345.00
CK1061 use 5787A	
1061	71.00
1061P	73.00
1062	107.00
1062P	110.00
1063	300.00
1064	866.00
1069	870.00
1069P	173.00
1071	75.35
1071P	71.00

SPECIAL PURPOSE TUBES CONT.

Type	Net Each
1072	$107.00
1072P	110.00
1073	300.00
1074	866.00
1079	169.00
1079P	172.00
1081	84.00
1081P	86.00
1082	119.15
1082P	122.15
1091	84.00
1091P	86.00
1092	119.15
1092P	122.15
XP1110	140.00
QKK1237	800.00
QKK1288A	575.00
QKK1289A	575.00
QKK1315	170.00
QKK1316	170.00
1319	67.00
QKK1459	85.00
QKH1463	650.00
1500T	500.00
QKK1579	100.00
1612	8.26
1613	3.87
1614	7.03
1616	19.60
1619	7.82
1620	9.51
1621	4.87
1622	7.03
1624	13.80
1625	7.00
1629	3.47
1635	5.02
1640 use 6405	
1699 Price on request	
1845P22A	99.00
1946	18.20
1947	53.20
1949	26.60
2000T	500.00
2020	105.00
2022	6.50
2031	19.00
2041 Price on request	
2042	115.00
2044	9.90
2045	14.90
2048	720.00
2050	2.67
2050A	2.48
205W	10.20
2054 Price on request	
2055	19.20
2056A	600.00
2060	57.40
2061	75.90
2062	69.00
2063	110.00
2064B	125.00
2065	160.00
2067	190.00
2070	330.00
2076/5R4GYB	2.42
2081/6AW8A Price on request	
2082/12AY7 Price on request	
ZB3200	835.00
4009	1670.00
4009-13 Price on request	
4010	920.00
4012 Price on request	
4013 Price on request	
4015 Price on request	
4015-21 Price on request	
4017 Price on request	
4019 Price on request	
4020 Price on request	
4021 Price on request	
4028A	37.60
4037A	31.85
4041 Price on request	
4042	15.00
4043	14.75
4053 Price on request	
4054 Price on request	
4055	45.85
4055/V1	45.85
4058	14.50

Type	Net Each
4062A	$40.90
4065	43.85
4076	14.50
4401/V1 use 8775	
4401/V2 use 4401/V3	
4401/V3	1435.00
4407	43.40
4409	6.55
4412	3415.00
4415/S use 8674/S	
4416/S use 8674/S	
422	12.10
4438	130.00
4439	130.00
4440	130.00
4441A	360.00
4445	705.00
4449A Price on request	
4454	965.00
4456	670.00
4459	380.00
4460	275.00
4461	335.00
4463	275.00
4464	280.00
4465	340.00
4471	23.55
4472	28.25
4473	42.00
4478 use 1735	
4486	1150.00
4488 use 7735	
4490	37.45
4491	45.50
4492	1650.00
4492/V1 use 4536	
4492/V2 use 4536	
4493	1055.00
4494	1055.00
4495	1055.00
4499	32.00
4500	480.00
4501/V3	260.00
4501/V4	430.00
4503A	555.00
4505	585.00
4506	1375.00
4507	155.00
4510	41.00
4513 use 8673	
4513/S use 8673S or 8674/S	
4516	155.00
4517	96.60
4518	115.00
4520	285.00
4521	605.00
4522	645.00
4523	130.00
4524	135.00
4524/V2	135.00
4524/V4	150.00
4525	170.00
4526	430.00
4526/V1	435.00
4531	90.00
4532	495.00
4532A	745.00
4532AMR	300.00
4532B	1225.00
4536	2445.00
4542	430.00
4543	190.00
4547	965.00
4549	2090.00
4550	1760.00
4551	1665.00
4552	15.00
4555	15.00
4557	60.90
4559A/8507A	260.00
4565	430.00
4566	430.00
4567	430.00
4568	430.00
4572	26.25
4583	1110.00
4584	1110.00
4585	1110.00
4588	395.00
4589	425.00
4591B	1900.00

Type	Net Each
4591G	$1950.00
4591L	1950.00
4591R	1900.00
4592B	1900.00
4592G	1950.00
4592L	1950.00
4592R	1900.00
4595	85.00
4600	370.00
4604	10.20
4616 Price on request	
4621	130.00
4624	310.00
4626	680.00
4628	1225.00
4629	445.00
4630	2445.00
4631	105.00
4632	1200.00
4634 use 4634/V1	
4634/V1	460.00
4635	2500.00
4636	525.00
4637	124.00
4638	725.00
4640	3165.00
4647	7215.00
4648	8325.00
4649 Price on request	
4651	350.00
4652/8042	13.20
4658 Price on request	
4661	645.00
4662	61.25
4664	9435.00
4665	585.00
4666	4400.00
4802	170.00
4809	350.00
4809B	350.00
4818	60.00
4819	395.00
4820	1225.00
4823	370.00
4825A	2445.00
4852	9296.00
5517	6.00
5530	550.00
5530H	550.00
5531	865.00
5541	755.00
5544	69.00
5545	99.00
5550	53.85
5551A/652	71.00
5551A/652PC	72.35
5552A/651	110.00
5552A/651PC	112.00
5553B/655	265.00
5553B/655PC	267.00
5554/679	213.00
5555/653B/FG238B	389.75
5555/23187	305.00
5555A	343.75
5556	77.00
5557/FG17/715	9.50
5558/FG32	17.50
5559/FG57	22.90
5560/632B/FG95	36.30
5561/104	67.70
5563A	61.60
5564	1115.00
5575/100/616	245.00
5576/200	265.00
5581	8.65
5582	9.60
5583	11.85
5604	615.00
5606	310.00
5606A	310.00
5619	505.00
5632/C3J	13.60
5636	6.55
5639	5.70
5639WA	11.45
5642	3.53
5643	6.85
5651	2.15
5651A	2.15
5651WA	4.28
5652	11.15

Type	Net Each
5653	$6.85
5654/6AK5W	2.70
5656	23.15
5657	650.00
5658	665.00
5664/C1BA	19.50
5665/C16J	52.50
5666	312.00
5667	400.00
5668	377.00
5669	600.00
5670	3.12
5670W	3.00
5671	2875.00
5672	3.01
5675	16.05
5676	4.35
5678	3.40
5681	2345.00
5682	2875.00
5682KT/8846	3150.00
5683/C1J/6014	11.70
5684/C3J/A/7306A	14.05
5684NE	17.85
5685/C6J/A	32.00
5686	4.34
5687	4.70
5687WA	6.15
5687WB	5.85
5691	10.12
5692	9.83
5693	8.97
5696	2.35
5696A	2.23
5702	5.75
5702WA	8.75
5702WB	12.45
4703	4.35
5703WA	9.75
5703WB	12.20
5713	875.00
5718	4.12
5721	135.00
5725/6AS6W/6079	3.72
5725W	3.50
5726/6AL5W	2.40
5727/2D21W	3.30
5734	26.43
5736	213.00
5744	4.35
5744WA	9.75
5744WB	11.80
5749/6BA6W	3.32
5750/6BE6W	4.48
5751	3.25
5755	12.85
5762/7C24	270.00
5763	2.95
5771/356	700.00
5783	9.75
5783WA	9.60
5784	6.85
5784WA	12.05
5784WB	20.25
5786	310.00
5787	6.30
5787A	7.40
5787WA	7.00
5794A use 6562	
5706	19.75
5814A	3.00
5819	99.35
5820A	1280.00
5820A/L	2100.00
5822A	125.00
5822A-PC	127.50
5823	2.00
5824	5.01
5825	26.40
5829WA	10.30
5834 use 649/5834	
5835 use 653/5835	
5836	100.00
5837	100.00
5840	5.00
5840W	5.78
58415842/417A	9.25
5842WA	18.90
5844	2.75
5847/404A	10.91
5847A	17.20

SPECIAL PURPOSE TUBES CONT.

Type	Net Each
5851 use 6397	
5859/5860	$68.60
5861/EC55	56.25
5866A/7086	45.00
5867A	48.50
5868	79.00
5869	38.25
5870	146.00
5875	4.45
5876A	10.60
5879	2.40
5881	3.10
5886	7.30
5889	29.50
5891	2160.00
5894	31.25
5896	4.59
5899	5.55
5902	4.80
5902WA	11.45
5915	2.70
5918	1197.00
5919	1525.00
5934	25.15
5936	1553.00
5963	1.64
5964	2.27
5965	2.45
5966	46.50
5973	426.00
5976	85.00
5986	1430.00
6005/6AQ5W	4.00
6007	4.80
6008	5.10
6011/7307A/710	12.75
6001/710/7307A	12.75
6012	8.69
6014/C1K/5683	12.30
6014/5683/C1K	11.80
6021	3.82
6021W	9.05
6021WA	9.50
6029	10.10
6043	165.00
6072	4.55
6073/OA2	3.94
6074/OB2	4.56
6076A	325.00
6080	5.90
6080WA	12.12
6080WB	28.35
6080WC	28.35
6082	5.84
6083	36.50
6084	7.55
6085	7.80
6087/5Y3WGTB	6.20
6088	4.75
6095 use 6005	
6096 use 5654	
6097 use 5726	
6101/6J6WA	6.54
6110	8.85
6111	4.02
6111WA	9.50
6112	4.40
6112WA	6.70
6115A	95.00
6130/3C45	25.00
6133 use 2K28A	
6135	2.60
6136/6AU6WA	3.50
6146	4.40
6146A	4.70
6146B/8298A	6.00
6146W	7.70
6155	41.75
6156	45.25
6159	4.90
6159B	5.75
6159W	9.35
6161	170.00
6166	910.00
6166A/7007A	1025.00
6173	17.05
6174	6.50
6177	285.00
6186/6AG5WA	4.60
6189/12AU7WA	4.60
6197	3.09

Type	Net Each
6199	$58.10
6201	3.55
6202	2.95
6205	5.80
6206	8.65
6211	2.95
6213A	9.05
6216	4.00
6217	100.00
6227	12.25
6228	3650.00
6236	150.00
6245	11.45
6247	14.75
6247WA	28.40
6252	46.50
5256	390.00
6257	395.00
5258	435.00
6263A	15.50
6264A	15.45
6265	4.45
6279/5C22	92.50
6286	5.40
6293	6.15
6293W	11.45
6307	217.00
6328	17.55
6336A	28.60
6336B	39.20
6350	2.63
6360	5.45
6360A	6.25
6379	1850.00
6381	100.00
6386	9.50
6390	170.00
6397	12.60
6399	170.00
6405/1640	11.75
6417	3.84
6418	5.67
6419	10.10
6420	477.00
6421	560.00
6421F	590.00
6422	475.00
6423	560.00
6423F	580.00
6424	557.00
6425	695.00
6425F	705.00
6426	755.00
6427	895.00
6442	39.00
6448	5975.00
6463	2.75
6472	16.20
6476A	19.10
6485	2.25
6499	295.00
6519	10.10
6521/R	845.00
6521A	870.00
6521A/R	870.00
6524	32.20
6526	8.00
6528	26.10
6528A	39.20
6533	17.50
6533WA	28.40
6540	14.20
6542	15.60
6542A	16.30
6550	6.45
6550V1	13.38
6562/5794A	8.90
6569	49.00
6570	14.30
6576	1035.00
6580	65.00
6611	15.55
6612	18.90
6623	215.00
6626/OA2WA	3.72
6627/OB2WA	2.68
6660/6BA6	1.90
6661/6BH6	2.30
6662/6BJ6	2.30
6663/6AL5	1.70
6664/6AB4	2.04

Type	Net Each
6669/AQ5	$1.95
6676/6CB6A	1.85
6677/6CL6	2.70
6678/6U8	2.25
6679/12AT7	2.05
6680/12AU7	1.75
6681/12AX7	1.60
6686	6.00
6688	8.25
6688A	9.54
6696	1154.00
6696A	1160.00
6697A	1400.00
6763	6.05
6771	71.90
6775/4-400C	64.50
6794	37.00
6800	434.00
6802	16.30
6806	7350.00
6807	42.45
6808	43.40
6810A	260.00
6816	60.60
6829	6.60
6832	22.10
6850	30.20
6855 use 716	
6856/740	23.50
6857/740P	28.10
6858/760	27.85
6859/760P	29.55
6860/C6J/F	36.00
6861 Price on request	
6866	1280.00
6883B/8032A/8552	6.35
6884	40.00
6887	1.46
6894	26.05
6895	26.05
6897	40.90
6930	435.00
6908	980.00
6909	16.35
6910	19.15
6914A	100.00
6920	1715.00
6922/E88CC	5.19
6929	135.00
6938	2242.00
6939	13.65
6949 Price on request	
6950 Price on request	
6952 Price on request	
6953	11.15
6960A	222.00
6977	3.05
6979	45.98
6989/C6J/KL	30.25
6989NE	35.50
7007	975.00
7014/604	11.80
7015/604L	13.00
7016/606	21.40
7017/606L	23.50
7018/615	10.05
7019/635	13.00
7020 use 635L	
7021 use 714	
7022/740L	23.85
7023/760L	29.40
7034 use 4X150A	
7038	175.00
7038/V	190.00
7040 use QKH456	
7044	3.42
7054	1.85
7055	1.57
7056	1.12
7057	2.90
7058	1.65
7059	1.83
7060	2.07
7061	1.83
7062	5.70
7094	49.00
7102	120.00
7117	15.30
7119	8.05
7120	577.00
7121	688.00

Type	Net Each
7136	$99.00
7158/404	85.00
7167	183.00
7171	64.00
7183A	965.00
7198A	1335.00
7200	210.00
7203 use 4CX250B	
7204/4CX250F	38.00
7209	36.00
7201	78.50
7211	45.00
7212 use 6146W	
7215	244.00
7246	10.10
7255	244.00
7258	2.53
7263A	360.00
7264 use 8674	
7265	415.00
7268B Price on request	
7269	69.00
7271	48.35
7289/3CX100A5	22.00
7293 use 8674	
7293A/L use 8674	
7295B use 7295C	
7295C	2150.00
7297/23052	26.25
7306A/5684/C3J/A	14.10
7307A/6011/710	13.00
7308	6.40
7315	960.00
7321/C6J/L	31.50
7326	405.00
7328A	1275.00
7360	5.38
7363	25.20
7377	36.75
7389B use 7389C	
7389C	2165.00
7413	1525.00
7459	315.00
7464	221.00
7479	1050.00
7480	1640.00
7482	4580.00
7482V	4580.00
7509A/710L	15.20
7513L use 8673S or 8674S	
7513S use 8673S or 8674S	
7527	65.00
7533	12.45
7539	1765.00
7551	4.38
7552	51.70
7553	57.20
7554	42.65
7556A/C3J/AL	17.85
7558	3.95
7560	4495.00
7560V	4590.00
7565	233.00
7576	14.40
7587	5.99
7604	230.00
7609	29.75
7642	1450.00
7649	130.00
7650	275.00
7651	270.00
7659	232.00
7668	2375.00
7669	70.00
7669PC	72.00
7670	88.00
7671	103.35
7671PC	110.00
7673	265.00
7673P	270.00
7676	94.90
7681	169.00
7685	170.00
7693	6.65
7694	5.55
7698	45.00
7698R	45.00
7699	24.75
7703	185.00
7703H	190.00
7717/6CY5	2.80

SPECIAL PURPOSE TUBES CONT.

Type	Net Each
7722	$20.80
7723 use 610	
7724/14GT8	1.60
7723NE	14.85
7724/14GT8	1.48
7726 use 710AL	
7735	36.00
7735A	150.00
7735B	175.00
7737	8.80
7740	149.00
7746	235.00
7750	900.00
7754	155.00
7764	155.00
7767	145.00
7786 use 660L	
7786NE	21.00
7788	15.55
7801	280.00
7815	25.50
7815R	25.50
7815RAL	27.00
7815BAL	28.00
7815XAL	28.00
7835 Price on request	
7842	69.70
7843	45.50
7850	290.00
7854	51.80
7855	44.00
7855K	44.00
7870	120.00
7888KAL	47.00
7895	4.20
7898	2.14
7900	320.00
7903	41.10
7904	44.30
7905	4.62
7978	17.15
7979	16.75
7982	1160.00
7986/5866A	45.00
8000	31.35
8005	22.65
8008	13.95
8013A	23.80
8020	31.00
8020W	16.50
8032	5.60
8032A/6883B/8552	5.80
8038	2425.00
8040	2550.00
8041	2425.00
8042	19.00
8043	48.50
8045 or 23185	1725.00
8053	120.00
8054	125.00
8055	160.00
8056	5.59
8057	47.10
8058	17.19
8072	22.65
8072W	44.00
8077/7054	1.86
8093AL use 8673	
8094/199	385.00

Type	Net Each
8096	$28.65
8106	1.95
8117A	78.10
8121	36.50
8121W	46.75
8122	38.05
8122W	46.75
8122/V1	125.00
8134	135.00
8134/4811	405.00
8134/V3	870.00
8134/4811	405.00
8136	1.65
8159/3CX10000A3	543.00
8160/3CX10000A7	580.00
8161/3CX2500A3	206.00
8162/3CX5000F7	295.00
8163/3-400Z	40.00
8164/3-1000Z	88.00
8165/4-65A	32.50
8166/4-1000A	135.00
8167/4CX300A	60.00
8168/4CX1000A	200.00
8169/4CX3000A	420.00
8170/4CX5000A	495.00
8171/4CX100000	575.00
8184	2555.00
8203	4.68
8223	11.30
8224	195.00
8226	85.60
8233	19.85
8234 Price on request	
8238/3CX3000A1	236.00
8239/3CX3000F1	246.00
8240/3CW5000A1	298.00
8241/3CW5000F1	270.00
8242/3CW5000A3	250.00
8243/3CW5000F3	260.00
8251/3CX2500F3	211.00
8255	9.55
8262	19.55
8270	164.00
8281/4CX15000A	695.00
8295A	195.00
8298A	5.25
8298A/6146B	5.15
8306	73.75
8317	4455.00
8379	1610.00
8393	4.08
8403	71.50
8432	180.00
8436	525.00
8437	2890.00
8438/4-400A	53.80
8438A/4-400A	48.75
8461	4417.00
8462	56.00
8480	760.00
8480/4810	1165.00
8501	1175.00
8507	69.70
8507A	190.00
8520	68.60
8521	610.00
8532	6.36
8532/6J4WA	5.60
8533	71.50

Type	Net Each
8534	$135.00
8535	135.00
8536	135.00
8537	135.00
8538	125.00
8539	125.00
8541	85.00
8541A	190.00
8541A/X	370.00
8552/6883B/8032A	5.75
8560A	46.50
8567	1140.00
8568	11,685.00
8571	260.00
8572A	215.00
8573A	210.00
8575	345.00
8575/V1	360.00
8575/V2	345.00
8587 Price on request	
8596	110.00
8605-1	850.00
8605-2	600.00
8605-3	600.00
8605/V1	820.00
8605/V2	565.00
8606	1890.00
8621/4CX250FG	40.50
8627	15.78
8627A	57.90
8628	5.00
8644	335.00
8645	440.00
8661	560.00
8664	1720.00
8664/V1	2040.00
8673	2165.00
8673/S	2165.00
8674	2165.00
8674/S	2165.00
8684	2990.00
8727	38.85
8745	39.00
8748	2150.00
8749	2150.00
8755	125.00
8755A	132.00
8756	125.00
8757	132.00
8775	2100.00
8791/V1	155.00
8792/V1	230.00
8793	580.00
8794	690.00
8795	3575.00
8806	690.00
8807	815.00
8808	16.20
8811 Price on request	
8824	9800.00
8825	9800.00
8826	9800.00
8828	130.00
8840	17,073.00
8844	37.95
8846	3150.00
8847	132.00
8850	620.00
8852	705.00

Type	Net Each
8853	$705.00
8854	1110.00
8857/V1	500.00
8857/V2	440.00
8858	1870.00
8873	38.00
8874	38.00
8875	38.00
8876	38.00
8890	750.00
8891	1135.00
8892	144.00
8893	187.00
8906/8907	51.50
8906AL/8907AL	55.00
8906XAL	58.00
8911	125.00
8912	86.00
8916	1135.00
9001	6.20
9002	5.15
9003	6.52
9005	8.05
9006	3.23
22612	41.10
22613	41.10
22614	41.10
22618	41.10
22619	41.10
22620	41.10
22624	44.40
22627	41.10
22637	41.10
22640	46.35
22643	44.30
22754	54.65
22759	225.00
22789	269.50
22800	865.00
22801	432.00
22802	895.00
22862 use 23185	
22868	54.65
22860	61.95
22923	43.20
22947	47.40
22948	49.40
22949	41.40
22994/5877	23.25
23029/857B	239.00
23052/7297	26.25
23063	9250.00
23095	600.00
23102/102A	175.00
32165	1650.00
23178	207.00
23185	1725.00
23187/5555	305.00
23200	220.00
23219B	895.00
23244	4412.00
23431	4412.00
23454	1700.00
23491	210.00
23658	40.00
23728	275.00
23791	315.00
30216	85.00

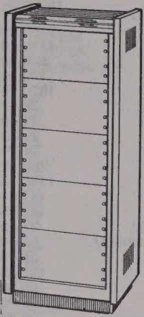
AMPEREX TUBES FOR INDUSTRY & COMMUNICATION

These tubes are specially designed for maximum performance in electronic equipment.

Cat.	Description	Net
383-EL34/6CA7	Audio output, pentode	$2.95
383-EL34/MP	Matched pair of above	5.60
383-EL84/6BQ5	Audio output, pentode	2.13
383-EL84/MP	Matched pair of above	5.30
383-EF86/6267	Low noise, AF pentode	2.00
383-ECC81/12AT7	RF double triode	1.88
383-ECC82/12AU7	Low-u AF double triode	1.65
383-ECC83/12AX7	High-u AF double triode	1.53
383-EZ80/6V4	Full-wave rect., 90 ma.	.83
383-EZ81/6CA4	Full-wave rect., 150 ma.	2.05
383-ECC91/6J6	RF double triode	2.45
383-EK90/6BE6	Pentagrid converter	1.88
383-EB91/6AL5	Double diode	1.63
383-EZ90/6X4	Full-wave rect., 70 ma.	1.88

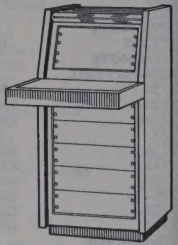
Cat.	Description	Net
383-EF94/6AU6	RF or AF pentode	$1.63
383-ECC85/6AQ8	RF double triode	1.50
383-EF95/6AK5	RF pentode	2.48
383-EL90/6AQ5	Output pentode, 12 W.	1.88
383-EBC90/6AT6	Twin diode, triode	1.03
383-EBC91/6AV6	Twin diode, triode	1.48
383-EF93/6BA6	Remote-cutoff pentode	1.80
383-HBC90/12AT6	Twin diode, triode	1.53
383-HBC91/12AV6	Twin diode, triode	1.28
383-HK90/12BE6	Pentagrid converter	1.65
383-HL92/50C5	Beam power pentode	1.65
383-EM81/6DA5	Electron Beam Indicator	2.93
383-EBF80/6N8	Pentode	2.70
383-ECC84	Double triode	1.46
383-GZ-34/5AR4	High power rectifier (FW)	2.33

BUD SERIES TWO THOUSAND

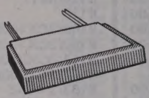


CABINET RACKS FOR INDUSTRY

The creative industrial designer's conception of what image the modern electronic enclosure should convey to enhance the prestige of the contents. It combines the dramatic appearance of sheer, square lines with rugged construction. Series 2000 racks have an all-welded frame of 14 gauge steel members. 18 gauge steel is used in the door, sides and top. "U" braces welded to the sides of the frame augment its strength and rigidity and act as the mounting for the vertical rails, which may be horizontally adjusted. Front panel mounting rails are tapped 10-32. Rear rails are pierced 9/32. The castor brackets in the base and drilled for Bud RC-7758 castors. Series 2000 Cabinet Racks are shipped completely assembled, with either solid sides and rear door, or louvred sides and rear door, as listed below. Rack panels are not included. Standard finish Gray texture, but Royal Blue finish is available on request.



SERIES 2000 DESK TOP



For use with Series 2000 or similar (19" panel) racks.

Cat. 6-DT-2960	For 23-7/8" depth	**Net $43.75**
Cat. 6-DT-2962	For 27-3/8" depth	**Net $45.10**

UPRIGHT CABINET RACKS

WITH PLAIN SIDES & REAR DOOR, SOLID TOP FOR 19" Rack Panel, O'All Width 24-3/16"								WITH LOUVRED SIDES & REAR DOOR, SOLID TOP FOR 19" Rack Panels, O'All Width 24-3/16"					
Inside Depth 20½" Outside Depth 23-7/8"			Inside Depth 24" Outside Depth 27-3/8"					Inside Depth 20½" Outside Depth 23-7/8"			Inside Depth 24" Outside Depth 27-3/8"		
Cat. No.	Lbs. Wt.	Net Ea.	Cat. No.	Lbs. Wt.	Net Ea.	O'All Ht.	Panel Space	Cat. No.	Lbs. Wt.	Net Ea.	Cat. No.	Lbs. Wt.	Net Ea.
6-E-2000	125	$140.15	6-E-2008	135	$165.60	30-1/4"	21"	6-E-2016	125	$150.30	6-E-2024	135	$171.60
6-E-2001	150	173.40	6-E-2009	160	192.30	40-3/4"	31-1/2"	6-E-2017	150	180.80	6-E-2025	160	207.30
6-E-2002	155	183.00	6-E-2010	165	202.95	44-1/4"	35"	6-E-2018	155	191.70	6-E-2026	165	219.15
6-E-2003	167	192.60	6-E-2011	187	213.65	51-1/4"	42"	6-E-2019	167	202.65	6-E-2027	187	230.85
6-E-2004	205	214.20	6-E-2012	222	237.15	61-3/4"	52-1/2"	6-E-2020	205	231.60	6-E-2028	222	256.55
6-E-2005	219	237.75	6-E-2013	235	263.55	70-1/2"	61-1/4"	6-E-2021	219	252.15	6-E-2029	235	285.20
6-E-2006	240	264.15	6-E-2014	265	292.80	79-1/4"	70"	6-E-2022	240	279.95	6-E-2030	265	316.70
6-E-2007	262	288.45	6-E-2015	285	319.55	88"	78-3/4"	6-E-2023	262	304.10	6-E-2031	285	345.15

INCLINED PANEL CABINET RACKS

WITH SOLID SIDES & REAR DOOR For 19" Rack Panels											WITH LOUVRED SIDES & REAR DOOR For 19" Rack Panels			
Cat. No.	Ea. 1-2	Ea. 3-4	Ea. 5-7	O'All Ht.	O'All Width	Outside Depth	Inside Depth	Slope Panel	Vert. Panel	Lbs Wt.	Cat. No.	Ea. 1-2	Ea. 3-4	Ea. 5-7
6-SE-2064	$190.95	$171.85	$152.75	51¼"	24-3/16"	23-7/8"	20½"	10½"	29¾"	173	6-SE-2067	$205.20	$184.70	$164.15
6-SE-2065	202.40	182.15	161.90	51¼"	24-3/16"	23-7/8"	20½"	15¾"	24½"	173	6-SE-2068	217.20	195.50	173.75
6-SE-2066	202.40	182.15	161.90	51¼"	24-3/16"	23-7/8"	20½"	17½"	22¾"	173	6-SE-2069	217.20	195.50	173.75

DOORS FOR UPRIGHT CABINETS

PLAIN DOORS					LOUVRED DOORS		
Cat. No.	Ea. 1-2	Ea. 3-4	Panel Space	Lbs. Wt.	Cat. No.	Ea. 1-2	Ea. 3-4
6-E-9000	$20.90	$18.80	21"	15	6-E-9020	$24.00	$21.60
6-E-9001	25.85	23.25	31½"	18	6-E-9021	29.75	26.80
6-E-9002	27.30	24.55	35"	19	6-E-9022	31.40	28.25
6-E-9003	28.70	25.85	42"	23	6-E-9023	33.05	29.75
6-E-9004	32.00	28.80	52½"	27	6-E-9024	36.50	32.85
6-E-9005	35.30	31.75	61¼"	29	6-E-9025	40.80	36.70
6-E-9006	41.30	37.15	70"	31	6-E-9026	45.30	40.75
6-E-9007	42.80	38.50	78¾"	33	6-E-9027	49.50	44.55

DOORS FOR INCLINED CABINETS

PLAIN DOORS					LOUVRED DOORS		
Cat. No.	Ea. 1-2	Ea. 3-4	Vert. Panel	Lbs. Wt.	Cat. No.	Ea. 1-2	Ea. 3-4
6-E-9008	$25.95	$23.35	29¾"	11	6-E-9028	$29.85	$26.85
6-E-9009	24.15	21.75	24½"	10.5	6-E-9029	27.95	25.15
6-E-9010	23.70	21.35	22¾"	9	6-E-9030	27.05	24.35

CABINET ACCESSORIES

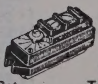
Cat. No.	Unit Description	Net Ea.
6-60-2361	Sliding Desk Top (Area 15-1/8" x 17-5/8")	$23.25
6-60-2380	Chassis support shelf, depth 19-9/32"	8.95
6-60-2381	Chassis support shelf, depth 22¾"	9.35
6-CE-2219	Supporting angles, pair	4.85
6-IP-1120	Dual View Panel Support	6.50
6-IP-1121	Dual View Panel Support	9.20
6-SD-1717	Sliding Drawer/Shelf Assembly	15.50
6-60-2363	Desk Top Drawer Assembly	64.70
6-60-2368	Drawer Assembly	37.70
6-D-1721	Drawer with adjustable slides	52.95

ADD-A-RACK SERIES

For use when it is desirable to join any of the Series 2000 enclosures in a bank of two or more. Each assembly consists of a frame, top, bottom, rear door, and cowlings.

PLAIN				LOUVRED		
Cat. No. 6-	Adds To 6-	Ea. 1-2	Lbs. Wt.	Cat. No. 6-	Adds To 6-	Ea. 1-2
AE-2032	E-2000	$119.30	90	AE-2048	E-2016	$124.05
AE-2033	E-2001	139.70	110	AE-2049	E-2017	143.70
AE-2034	E-2002	146.40	113	AE-2050	E-2018	150.50
AE-2035	E-2003	153.15	115	AE-2051	E-2019	157.40
AE-2036	E-2004	167.30	145	AE-2052	E-2020	171.95
AE-2037	E-2005	186.75	148	AE-2053	E-2021	192.05
AE-2038	E-2006	208.05	152	AE-2054	E-2022	213.50
AE-2039	E-2007	223.50	158	AE-2055	E-2023	229.70
AE-2040	E-2008	133.40	120	AE-2056	E-2024	135.15
AE-2041	E-2009	156.30	130	AE-2057	E-2025	158.70
AE-2042	E-2010	163.55	135	AE-2058	E-2026	166.85
AE-2043	E-2011	170.75	138	AE-2059	E-2027	175.05
AE-2044	E-2012	186.45	142	AE-2060	E-2028	191.10
AE-2045	E-2013	208.40	164	AE-2061	E-2029	213.50
AE-2046	E-2014	232.05	168	AE-2062	E-2030	238.10
AE-2047	E-2015	256.80	172	AE-2063	E-2031	263.25
ASE-2084	SE-2064	161.60	115	ASE-2087	SE-2067	163.50
ASE-2085	SE-2065	172.40	115	ASE-2088	SE-2068	176.60
ASE-2086	SE-2066	172.40	120	ASE-2089	SE-2069	176.60

TEM-STAT SWITCH

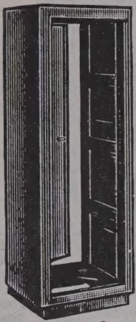


A bi-metallic, snap-action SP-ST-NO switch for controlling ventilators, warning lights, etc. Contacts rated 8 amps @ 120 v-ac, or 4 amps @ 240 v-ac. Overall size 2-15/16" x 1" x 1-7/32" high.

Cat. No.	Temperature Range	Ea. 1-24	Ea. 25-49
6-TS-15	80° F. to 170° F. adjustable	$6.65	$6.00

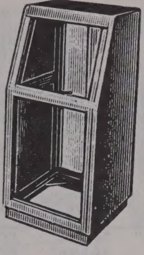
BUD SERIES SIXTY CABINET RACKS

Rack Frame


Enclosed

UPRIGHT CABINET RACKS
COMPLETELY ASSEMBLED
WELDED 14 GA. STEEL FRAME
FOR 19" RACK PANELS

Rigid frame assemblies insure the dimensional stability needed for exact acceptance of rack mounting apparatus, either front or rear. The adjustable vertical front rails are drilled and tapped 10-32 on W.E. spacing, the rear rails on universal spacing. Cabinet bases are drilled to accept Bud No. RC-7758 truck castors. Cabinet doors are reinforced by a vertical 6" channel, may be hinged either right or left, and are equipped with a latch. Doors fit cabinet rear or front. Cabinets are shipped assembled, with solid rear door, sides and top. Accessory louvred doors, sides and tops are listed below. Add-A-Rack assemblies, consisting of a frame, rear door, and top are available. Standard cabinet finish is textured. Available in two-tone Blue (BBY) or two-tone gray (GGY). Add -BBY or -GGY to Cat. No. when ordering.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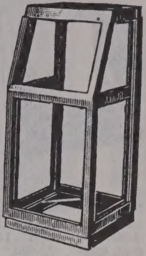

Rack Frame

			CABINET				LOUVRED DOOR			LOUVRED SIDES			PERFORATED TOP		
O'All Ht.	Panel Space	Lbs. Wt.	Cat. No.	Ea. 1-2	Ea. 3-4	Ea. 5-7	Cat. No.	Lbs. Wt.	Ea. 1-2	Cat. No.	Lbs. Wt.	Ea. 1-3	Cat. No.	Lbs. Wt.	Ea. 1-3
29-5/8"	21	118	6-60-2300	$129.80	$116.80	$103.85	6-60-2540	8.0	$24.70	6-60-2580	12.5	$34.20	6-60-2370	6	$7.95
40-1/8"	31½"	156	6-60-2301	160.65	114.60	128.50	6-60-2541	11.5	30.70	6-60-2581	17.5	45.05			
50-5/8"	42"	173	6-60-2302	178.40	160.55	142.70	6-60-2542	15.5	34.15	6-60-2582	21.0	53.70	One top fits all cabinets in this group.		
61-1/8"	52½"	197	6-60-2303	198.20	178.40	158.55	6-60-2543	19.0	37.65	6-60-2583	26.3	61.15			
69-7/8"	61¼"	220	6-60-2304	220.25	198.25	176.20	6-60-2544	22.5	42.10	6-60-2584	30.0	69.60			
78-5/8"	70"	235	6-60-2305	244.65	220.20	195.70	6-60-2545	25.5	46.75	6-60-2585	34.0	77.25			
87-3/8"	78¾"	265	6-60-2306	267.15	240.45	213.70	6-60-2546	29.0	51.00	6-60-2586	38.0	81.35			

Cabinets above are 24-1/16" wide x 22" deep outside. Clear inside depth 20½". Top opening 18-5/16" x 17".

			CABINET				LOUVRED DOOR			LOUVRED SIDES			PERFORATED TOP		
O'All Ht.	Panel Space	Lbs. Wt.	Cat. No.	Ea. 1-2	Ea. 3-4	Ea. 5-7	Cat. No.	Lbs. Wt.	Ea. 1-2	Cat. No.	Lbs. Wt.	Ea. 1-3	Cat. No.	Lbs. Wt.	Ea. 1-3
29-5/8"	21"	156	6-60-2307	153.35	138.00	122.70	Doors are the same as listed above for each cabinet height.			6-60-2587	14.5	40.05	6-60-2371	7	$8.40
40-1/8"	31½"	176	6-60-2308	178.10	160.30	142.50				6-60-2588	20.0	52.35			
50-5/8"	42"	185	6-60-2309	197.90	178.10	158.30				6-60-2589	24.0	60.95	One top fits all cabinets in this group.		
61-1/8"	52½"	211	6-60-2310	219.75	197.80	175.80				6-60-2590	29.5	70.85			
69-7/8"	61¼"	240	6-60-2311	244.20	219.80	195.35				6-60-2591	34.5	77.55			
78-5/8"	70"	256	6-60-2312	271.25	244.15	217.00				6-60-2592	39.0	85.40			
87-3/8"	78¾"	267	6-60-2313	296.00	266.40	236.80				6-60-2593	43.5	90.00			

Cabinets above are 24-1/16" wide x 25½" deep outside. Clear inside depth 24". Top opening 18-5/16" x 20½".

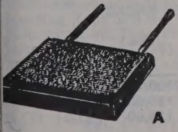
INCLINED FRONT CABINET RACKS
ASSEMBLED, SOLIDLY WELDED 14 GA. STEEL FRAME

nclined front portion slanted 20° off ertical for easy viewing. Adjustable rear, ertical front and inclined front panel nounting rails for standard 19" rack panels. 'abinets are supplied completely assembled vith solid rear door, top and sides, less ertical front door and panels. Accessory ouvred doors, tops and sides are listed elow.

Cat. No.	Panels Slope	Panels Vert.	Top Opening	Lbs. Wt.	Ea. 1-2	Ea. 3-4	Ea. 5-7
6-60-2330	10½"	29¾"	11-13/16" x 18-5/16"	165	$194.70	$175.25	$155.75
6-60-2331	15¾"	24½"	10" x 18-5/16"	165	206.30	185.65	165.05
6-60-2332	17½"	22¾"	9-7/8" x 18-5/16"	165	206.30	185.65	165.05

Overall outside size 50-5/8" high. 24-1/16" wide, 22" deep. Inside clear depth 20-1/2". Add suffix -GGY (gray) or -BBY (blue) to Cat. No. to indicate color wanted.

OUVRED FRONT DOOR				LOUVRED REAR DOOR					LOUVRED SIDES				PERFORATED TOP			
at. o.	Lbs. Wt.	Ea. 1-2	Ea. 3-4	Cat. No.	Lbs. Wt.	Ea. 1-2	Ea. 3-4	Use With	Cat. No.	Lbs. Wt.	Prs. 1-2	Prs. 3-4	Cat. No.	Lb. Wt.	Ea. 1-2	Ea. 3-4
60-2550	11.0	$30.80	$27.70	6-60-2542		$34.15	$30.75	60-2330	6-60-2594	11.0	$51.00	$45.90	6-60-2372	3½	$6.15	$5.55
-60-2551	9.5	25.95	23.35					60-2331	6-60-2595	9.5	52.65	47.40	6-60-2373	3½	5.90	5.30
-60-2552	9.0	25.05	22.55	Fits all 3 cabinets.				60-2332	6-60-2596	9.0	53.25	47.95	6-60-2374	3¼	5.90	5.30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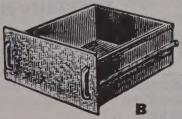
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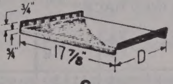

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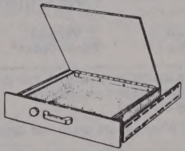
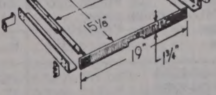

D

SERIES SIXTY ACCESSORIES

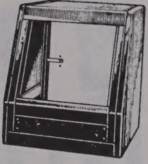
No's 60-2360/62 have antique white formica surface, bolt to rack rails and will support 200 lbs. No. 0-2368 slides on Nylon rollers to full depth. No's 60-2380/81 bolt to cabinet "U" braces, will support 00 lbs. No. 2263 combines drawer and desk top functions. No. 60-2361 has formica surface, supports p to 50 lbs. Specify cabinet color for match when ordering. *Front panel height.

at.	See	Panel*	Description	Lbs.	Ea. 1-2	3-4	5-7
60-2360	A	.....	24-1/8" wide desk top for 22" depths	22.0	$42.05	$37.85	$33.65
60-2362	A	.....	24-1/8" wide desk top for 25½" depths	23.0	43.35	39.00	34.70
60-2368	B	7"	Inside size 16-9/16" x 6-5/16" x 19-3/16"	28.0	37.70	33.95	30.15
60-2363	D	3½"	Desk top and drawer. Inside depth 15"	19.0	64.70	58.25	51.75
60-2380	C	.....	Chassis support shelf, depth 19¼"	8.25	8.95	8.05	7.15
60-2381	C	.....	Chassis support shelf, depth 22¾"	8.25	9.35	8.40	7.50
60-2361	E	1¾"	Sliding desk top. Usable area 11" x 16-7/8"	9.25	23.25	20.95	18.60



E

BUD CABINETS & WEDGES

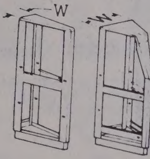


NEW 60 SERIES CONVERTIBLES
FOR ANGLE PANEL VIEWING

Designed to provide the right viewing angle for best comfort to the operator. They may be placed on a desk or bench, or reversed (as shown at right) and used on top of Series 60 or other tall cabinets. They are built on the same principles as other Series 60 enclosures, and are extremely rugged housings for delicate instruments and systems. They provide maximum access to the interior for installation or adjustment of components. Standard colors are two-tone gray (GGY) or two-tone blue (BBY). Specify color when ordering. *Inclined panel space. Enclosures accept standard 19" rack panels.

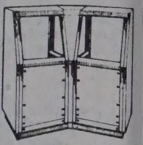
Series 60-4600 include welded framework, plain sides, plain rear door and solid top.

Cat. No.	O'All Ht.	O'All Width	Depth Outside	Depth Inside	Panel Space IP*	Panel Space Vert.	Top Opening	Ea. 1-3	4-6	7-9
6-60-4600	22-13/16"	24-1/16"	22"	20½"	10½"	3½"	11-13/16" x 18-5/16"	$192.50	$173.25	$154.00
6-60-4601	27-3/4"	24-1/16"	22"	20½"	15-¾"	3½"	10" x 18-5/16"	194.70	175.25	155.75
6-60-4602	29-3/8"	24-1/16"	22"	20½"	17½"	3½"	9-7/8" x 18-5/16"	197.10	177.40	157.70
Series 60-4700 include welded framework, loubred sides, plain rear door and solid top.										
6-60-4700	22-13/16"	24-1/16"	22"	20¼"	10½"	3½"	11-13/16" x 18-5/16"	200.50	180.45	160.40
6-60-4701	27-3/4"	24-1/16"	22"	20¼"	15¾"	3½"	10" x 18-5/16"	204.00	183.60	163.20
6-60-4702	29-3/8"	24-1/16"	22"	20¼"	17½"	3½"	9-7/8" x 18-5/16"	206.20	185.60	164.95
Series 60-4800 include welded framework, plain sides, louvred rear door and solid top										
6-60-4800	22-13/16"	24-1/16"	22"	20¼"	10½"	3½"	11-13/16" x 18-5/16"	197.10	177.40	157.70
6-60-4801	27-3/4"	24-1/16"	22"	20¼"	15¾"	3½"	10" x 18-5/16"	199.30	179.35	159.45
6-60-4802	29-3/8"	24-1/16"	22"	20¼"	17½"	3½"	9-7/8" x 18-5/16"	201.70	181.55	161.35
Series 60-4900 include welded framework, louvred sides, louvred rear door and solid top.										
6-60-4900	22-13/16"	24-1/16"	22"	20¼"	10½"	3½"	11-13/16" x 18-5/16"	202.20	182.00	161.75
6-60-4901	27-3/4"	24-1/16"	22"	20¼"	15¾"	3½"	10" x 18-5/16"	204.80	184.30	163.85
6-60-4902	29-3/8"	24-1/16"	22"	20¼"	17½"	3½"	9-7/8" x 18-5/16"	207.20	186.50	165.70



60 SERIES WEDGES
FOR 60 SERIES UPRIGHT & INCLINED RACKS

Standard wedge units which can be used to create custome consoles or join any number of Series 60 Upright or Sloping Panel Units to conform to any configuration or space requirements. They are easily and quickly attached to the adjacent framework by means of simple fasteners. Choice of 15° or 45° Wedge Units permits the creation of a wide variety of individualized designs. Wedges have an all-welded, 16-gauge steel frame. Rear panel is removeable for access to interior. Wedges are available with a dark gray (GG) frame and light gray (GY) panel, or dark blue frame (BB) and light blue panel (BY). Specify when ordering.



15° WEDGES
FOR SERIES 60 UPRIGHT RACKS

Cat. No.	Panel Space	Depth*	Wedge "W"	Ea. 1-9	4-6	7-9
6-60-8300	21"	22"	7-3/16"	$ 81.20	$ 73.00	$ 64.95
6-60-8301	31½"	22"	7-3/16"	95.80	86.20	76.65
6-60-8302	42"	22"	7-3/16"	105.00	94.50	84.00
6-60-8303	52½"	22"	7-3/16"	115.80	104.20	92.65
6-60-8304	61¼"	22"	7-3/16"	129.80	116.80	103,85
6-60-8305	70"	22"	7-3/16"	142.90	128.60	114.30
6-60-8306	78¾"	22"	7-3/16"	155.80	140.20	124.65
6-60-8307	21"	25½"	8-1/16"	92.00	82.80	73.60
6-60-8308	31½"	25½"	8-1/16"	106.60	95.95	85.30
6-60-8309	42"	25½"	8-1/16"	119.10	107.20	95.30
6-60-8310	52½"	25½"	8-1/16"	129.80	116.80	103.85
6-60-8311	61¼"	25½"	8-1/16"	145.00	130.50	116.00
6-60-8312	70"	25½"	8-1/16"	162.80	146.50	130.25
6-60-8313	78¾"	25½"	8-1/16"	180.70	162.65	144.55

FOR SERIES 60 INCLINED RACKS

Cat. No.	Vertical Panel Space*	Wedge "W"	Ea. 1-3	4-6	7-9
6-60-8330	29¾"	7-3/16	$124.40	$111.95	$ 99.50
6-60-8331	24½"	7-3/16	132.00	118.80	105.60
6-60-8332	22¾"	7-3/16	132.00	118.80	105.60

45° WEDGES
FOR SERIES 60 UPRIGHT RACKS

Cat. No.	Panel Space	Depth*	Wedge "W"	Ea. 1-9	4-6	7-9
6-60-8400	21"	22"	18-1/4"	$ 88.80	$ 79.90	$ 71.05
6-60-8401	31½"	22"	18-1/4"	102.80	92.50	82.25
6-60-8402	42"	22"	18-1/4"	112.00	100.80	89.60
6-60-8403	52½"	22"	18-1/4"	121.20	109.10	96.95
6-60-8404	61¼"	22"	18-1/4"	137.40	123.65	109.90
6-60-8405	70"	22"	18-1/4"	150.40	135.35	120.30
6-60-8406	78¾"	22"	18-1/4"	162.80	146.50	130.25
6-60-8407	21"	25½"	20-15/16"	97.40	87.65	77.90
6-60-8408	31½"	25½"	20-15/16"	113.60	102.25	90.90
6-60-8409	42"	25½"	20-15/16"	126.60	113.95	101.30
6-60-8410	52½"	25½"	20-15/16"	137.40	123.65	109.90
6-60-8411	61¼"	25½"	20-15/16"	152.10	136.90	121.70
6-60-8412	70"	25½"	20-15/16"	169.90	152.90	135.90
6-60-8413	78¾"	25½"	20-15/16"	188.30	169.45	150.65

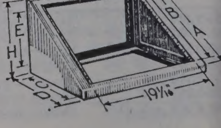
FOR SERIES 60 INCLINED RACKS

Cat. No.	Vertical Panel Space*	WEDGE "W"	Ea. 1-3	4-6	7-9
6-60-8430	29¾"	18-1/4"	$130.40	$117.35	$104.30
6-60-8431	24½"	18-1/4"	139.60	125.65	111.70
6-60-8432	22¾"	18-1/4"	139.60	125.60	111.70

*Where panel space and depth is as indicated on existing Series 60 Upright or Inclined Cabinet Racks.

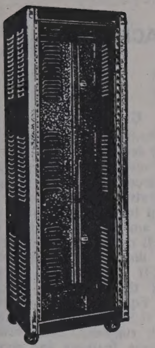
60 SERIES TURRETS

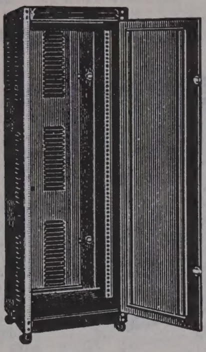
Any one of three sides may be attached to a 60 Series upright rack or placed on a horizontal surface for viewing angles of 33° or 57° from vertical or horizontal. Made of 16 ga. steel. All sides take 19" rack panels. Specify dark blue texture (BB), dark gray texture (GG) or hammartone gray (HG) finish on order.

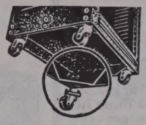


Cat. No.	Panel Ht. B.	Panel Ht. C.	Panel Ht. E.	O'All Size D.	O'All Size H.	Lbs. Wt.	Ea. 1-2	Ea. 3-4	Ea. 5-7
6-60-2364	17½"	14"	8¾"	17-7/8"	12-5/16"	17	$41.30	$37.15	$33.05
6-60-2365	12¼"	10½"	7"	14-3/8"	10-3/16"	14	34.50	31.05	27.60
6-60-2366	21"	17½"	10½"	20-13/16"	14-3/8"	20	43.40	32.05	34.70

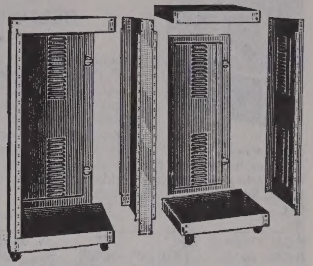
BUD CABINET RACKS


Deluxe


Super-Deluxe


Roller Detail

Bud Cabinet and rack assemblies accept the rack panels listed on other pages of this catalog. When ordering specify color by adding the suffix to Catalog Number given in listings below.


ADD-A-RACK

SUPER DELUXE RACKS

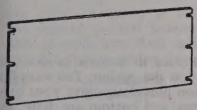
With smoothly rounded corners. Hinged doors both front and rear for complete enclosure and protection of apparatus. Rear door and sides are louvred for ventilation. Vertical panel supports are adjustable in 1" steps for up to 6" maximum panel recess. Cabinet depth: clear inside 16-1/8", overall outside 17-1/8". Cabinet and doors made of 16 ga. steel, panel mounting rails 12 ga. steel. Bases drilled for RC-7756 castors. Shipped knockdown, less panels and castors. When ordering add suffix HG (Gray Hammertone), BR (Black Rinkletex), or GR (Gray Rinkletex) to Cat. No. to denote color.

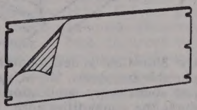
FOR 19" RACK PANELS

Cat. No.	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-CR-2174	42-1/16"	36¾"	102	$91.85	$82.65	$73.50
6-CR-2171	47-5/16"	42"	104	99.20	89.30	79.35
6-CR-2172	66-9/16"	61¼"	138	128.10	115.30	102.50
6-CR-2175	75-5/16"	70"	150	137.70	123.95	110.15
6-CR-2173	82-5/16"	77"	163	153.70	138.35	122.95

Racks above: clear inside width 17-7/8", overall width 22".

LARGER QUANTITY PRICES ALSO AVAILABLE


PS & PA Panels


SFA Panels

ADD-A-RACKS
FOR 19" PANEL RACKS

For adding to Deluxe and Space-Saver Racks when multiple assemblies are required. Any number may be added. Each Add-A-Rack consists of a top, bottom, rear door, and center dividing section. The louvred side of the existing cabinet rack is moved to the outside when assembling. Shipped knockdown with instructions and hardware, less panels. *Available with HG (Gray Hammertone), BR (Black Rinkletex), or GR (Gray Rinkletex) finish. †Available with HG (Gray Hammertone) finish only. Add suffix HG, BR or GR to Catalog Number.

Cat. No.	Adds To	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-AR-1775*	CR-1771	74	$75.65	$68.10	$60.50
6-AR-1776*	CR-1772	100	94.00	84.60	75.20
6-AR-1777*	CR-1773	113	115.55	104.00	92.45
6-AR-1778*	CR-1774	70	71.15	64.05	56.90
6-AR-1779*	CR-1780	107	99.45	89.50	79.55

DELUXE RACKS

Similar in appearance to the Super Deluxe Racks but with a door in rear only. The vertical rack panel mounting strips are fixed in positions so panels are flush with face of rack. Bases are drilled to take RC-7756 castors. Cabinet and door made of 16 ga. steel, panel mounting rails 11 ga. steel. When ordering add suffix HG (Gray Hammertone), BR (Black Rinkletex), or GR (Gray Rinkletex) to Catalog Number to denote color wanted. Racks are shipped unassembled, less panels and castors.

FOR 19" RACK PANELS

Cat. No.	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-CR-1774	42-1/16"	36¼"	82	$72.45	$65.20	$57.95
6-CR-1771	47-5/16"	42"	92	82.00	73.80	65.60
6-CR-1772	66-9/16"	61¼"	115	102.60	92.35	82.10
6-CR-1780	75-5/16"	70"	125	105.30	94.75	84.25
6-CR-1773	82-5/16"	77"	135	118.15	106.35	94.50

Rack cabinets above have clear inside width of 17-7/8", depth of 16-1/8". Overall outside width 22", depth 17-1/8".

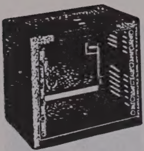
STANDARD 19" RACK PANELS

With standard notching to fit racks and rack cabinets. Types PS and PA are wrapped with paper to protect the finish during shipment and handling. Type SFA has both sides protected by a sturdy pressure-sensitive white paper which is useful for making layouts, indicating hole centers, etc. Types PS and PA panels are available with Black Rinkletex (BR), Gray Rinkletex (GR), Gray Hammertone (HG), smooth light gray textured (GY), or smooth light blue textured (BY), white (WH); sand (S) finish. Specify color by adding BR, GR, GY, BY, WH or S suffix to the Catalog Number.

1/8" STEEL PANELS Colors BR,GR,GY,BY,WH,S				1/8" ALUMINUM PANELS Colors BR,GR,GY,BY,WH,S					1/8" ALUMINUM PANELS With Bright Finish				3/16" ALUMINUM PANELS With Bright Finish			
Cat. No.	Lbs. Wt.	Ea. 1-49	50-99	Cat. No.	Lbs. Wt.	Ea. 1-49	50-99	Panel Ht.	Cat. No.	Lbs. Wt.	Ea. 1-49	50-99	Cat. No.	Lbs. Wt.	Ea. 1-49	50-99
6-PS-1250	1.25	$1.60	$1.45	6-PA-1101	0.38	$1.85	$1.65	1.75"	6-SFA-1831	0.25	$1.60†	$1.45‡	6-SFA-3161	0.75	$3.00	$2.70
6-PS-1251	2.25	1.85	1.65	6-PA-1102	0.75	2.60	2.35	3.50"	6-SFA-1832	0.75	2.65†	2.40‡	6-SFA-3162	1.25	4.25	3.85
6-PS-1252	3.25	2.35	2.10	6-PA-1103	1.13	3.35	3.00	5.25"	6-SFA-1833	1.00	3.40	3.05	6-SFA-3163	1.75	5.60	5.05
6-PS-1253	4.50	2.50	2.25	6-PA-1104	1.75	4.25	3.85	7"	6-SFA-1834	1.75	4.15	3.75	6-SFA-3164	2.50	7.00	6.30
6-PS-1254	6.00	3.35	3.00	6-PA-1105	2.00	4.85	4.35	8.75"	6-SFA-1835	2.00	4.90	4.40	6-SFA-3165	3.00	8.25	7.45
6-PS-1255	7.00	3.90	3.50	6-PA-1106	2.50	6.15	5.55	10.50"	6-SFA-1836	2.50	6.35	5.70	6-SFA-3166	3.75	9.60	8.65
6-PS-1256	8.25	4.40	3.95	6-PA-1107	2.75	7.20	6.50	12.25"	6-SFA-1837	2.75	7.25	6.55	6-SFA-3167	4.50	12.20	11.00
6-PS-1257	9.50	5.00	4.50	6-PA-1108	3.00	8.20	7.40	14"	6-SFA-1838	3.00	8.25	7.45	6-SFA-3168	5.00	13.85	12.45
6-PS-1258	10.75	5.40	4.85	6-PA-1109	3.25	9.10	8.20	15.75"	6-SFA-1839	3.50	9.35	8.40	6-SFA-3169	5.75	15.55	14.00
6-PS-1259	11.75	6.10	5.50	6-PA-1110	3.40	9.95	8.95	17.50"	6-SFA-1840	4.00	10.25	9.25	6-SFA-3170	6.13	17.20	15.50
6-PS-1260	13.00	6.70	6.05	6-PA-1111	4.25	10.85	9.75	19.25"	6-SFA-1841	4.25	11.45	10.25	6-SFA-3171	7.00	18.85	16.95
6-PS-1261	14.25	7.60	6.85	6-PA-1112	5.00	12.00	10.80	21.21"	6-SFA-1842	5.00	12.35	11.10	6-SFA-3172	7.25	20.45	18.40

†1-24, ‡25-49

BUD CABINETS & RACKS



DELUXE RACKS
FOR DESK-TOP USE

Rounded vertical front corners. Standard 19" rack panels mount flush with rack face. Top opening, 16" x 10-9/16", has piano-type hinge and recessed finger lift. Cabinet rear has 2½" high bottom opening for cable entry or access to connectors, etc. Overall width 22", depth 14¾". Clear inside depth 14-3/16". "No scratch" metal feet on cabinet bottom. Available with gray hammertone (HG), gray rinkletex (GR) or black rinkletex (BR) finish. Specify which when ordering.

Cat. No.	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-CR-1726*	8¾"	7"	28	$22.80	$20.50	$18.25
6-CR-1741*	10-9/16"	8¾"	30	24.30	21.85	19.45
6-CR-1740*	12-5/16"	10½"	34	28.45	25.60	22.75
6-CR-1742*	14-1/16"	12¼"	27	29.30	26.35	23.45
6-CR-1739*	15-13/16"	14"	40	39.75	35.80	31.80

*With hinged top and solid back. Full size steel panel.

6-CR-1743†	19-5/16"	17½"	47	$38.90	$35.00	$31.10
6-CR-1727†	22-13/16"	21"	51	41.75	37.60	33.40
6-CR-1744†	28-1/16"	26¼"	58	44.90	40.40	35.90
6-CR-1728†	33-5/16"	31½"	68	47.75	43.00	38.20
6-CR-1745†	36-13/16"	35"	78	50.25	45.25	40.20

†With hinged top and rear door. Full size steel panel.

HEAVY-DELUXE RACKS

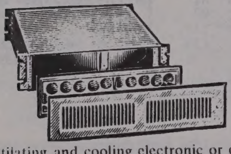
Similar to those above but with heavier construction and an inside depth of 16-1/16". Cabinets have solid top and hinged rear door. Standard 19" rack panels fit flush with rack face. Available with gray hammertone (HG), black rinkletex (BR) or gray rinkletex (GR) finish. Less panels.

Cat. No.	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-CR-1736	24½"	19¼"	47	$42.85	$38.55	$34.30
6-CR-1737	31½"	26¼"	56	46.00	41.40	38.60
6-CR-1738	40¼"	35"	67	54.70	49.25	43.75

ADD-A-CABS

For use with the Heavy-Duty Deluxe Rack Cabinets above when multiple, side-by-side units are required. Each consists of a top, bottom, rear door and divider as in the Add-A-Racks. Available in gray hammertone, gray or black rinkletex.

Cat. No.	Adds To	Lbs. Wt.	Ea 1-14	Ea. 15-24	Ea. 25-34
6-ACR-1936	CR-1736	42	$42.50	$38.25	$34.00
6-ACR-1937	CR-1737	52	52.35	47.10	41.90
6-ACR-1938	CR-1738	57	53.95	48.55	43.15



TRANS-AIRE CLOSED CABINET VENTILATORS

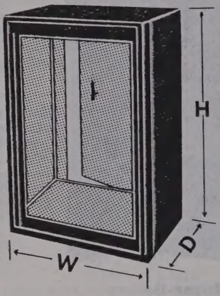
For 19" closed cabinets. Dual centrifugal blower wheels provide clean, filtered air for ventilating and cooling electronic or electrical equipment. Motors are permanently lubricated. For operation from 115 v-ac 50-60 Hz. Equipped with 24" long, 3-wire cord and plug. *2 speed.

Cat. No.	Size Ht. x Depth	CFM	Motor RPM	Ea. 1-9	10-14
6-B-23A	3½"x12"	180/130	1450/1250*	$91.35	$82.20
6-B-25A	5¼"x14½"	350/160	1420/1075*	104.30	93.85
6-B-27A	7"x14½"	515/280	1350/1150*	117.20	105.50
6-B-50	3½" x 6-3/8"	150	3150	88.80	79.90
6-B-52	5¼" x 9"	150	3000	91.70	82.55
6-B-54	7"x10-3/16"	300	1550	117.45	105.70

REPLACEMENT FILTERS

Cat. No.	For Use With	Ea. 1-24	25-49
6-BF-24	Trans-Aire Models B-23A & B-50	$1.70	$1.55
6-BF-26	Trans-Aire Model B-25A	1.85	1.65
6-BF-28	Trans-Aire Model B-27A	2.10	1.90
6-BF-53	Trans-Aire Model B-52	1.85	1.65
6-BF-55	Trans-Aire Model B-54	2.00	1.80

NEW CABINET RACKS



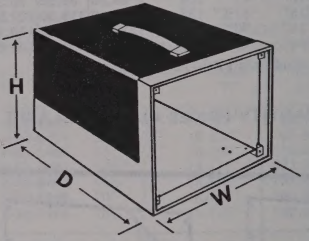
CLASSIC II

Clean, contemporary design, quality and dependability . . . these are the advantages that have led to the acceptance of the Classic II cabinets and which, in turn, have led to the development of a new and compatible line of Classic II cabinet racks. Aesthetically, the design of the new Classic II cabinet racks equals that of the Designer's Group Racks. Equally important, the Classic II Series offers a quality product ruggedly constructed with those features and economies synonmous with all BUD Products. Classic II Cabinet Racks come in four sizes, and two standard colors: Grey textured (GT) and Royal blue (RB); select white for panels (WH). ★Include complete catalog number when ordering i.e., 006-ARG-9302.

Cat. 006-★	Dimensions H"x W" x D"	Panel H" (19" width)	Wgt. Lbs.	Net Each
AGR-0302	22 x 22 x 47-5/16	42"	126	$160.65
AGR-9303	22 x 22 x 57-13/16	52½"	146	178.45
AGR-9304	22 x 22 x 66-9/16	61¼"	162	198.30
AGR-9306	22 x 22 x 82-5/16	77"	181	227.10

Front Doors For CLASSIC II Racks
(rear doors included with all racks)

Cat. 006-★	Fits Rack #	Weight Lbs.	Net Each
AGD-932	AGR-9302	19	$32.60
AGD-933	AGR-9303	23	34.60
AGD-934	AGR-9304	26	36.10
AGD-936	AGR-9306	31	39.95



NEW BUD "SHOW CASE"

Use ShowCase as desktop instrument cases, in systems, in racks, as portable inclosures. ShowCase gives you the option. Ten sizes for just about every application. Function plus design give your products the competitive edge. Top, sides, and bottom are .050" aluminum; front panel is .090", rear panel is .050". For added strength, gussets have been engineered into the sides of the unit. Two standard color combinations: Black Textured (BT) and white, Royal Blue (RB) and white.

Cat. 006-★	Dimensions H" x W" x D"	Wgt. Lbs.	Net Each
BB-1800	6-7/16 x 5½ x 11	2½	$36.65
BB-1801	6-7/16 x 8-5/16 x 11	3	38.10
BB-1802	8-3/16 x 5½ x 11	3	37.75
BB-1803	8-3/16 x 8-5/16 x 11	3¼	39.50
BB-1804	8-3/16 x 11-1/16 x 11	4	41.10
BB-1805	9-15/16 x 5½ x 11	3¼	38.15
BB-1806	9-15/16 x 8-5/16 x 11	3¼	39.75
BB-1807	9-15/16 x 8-5/16 x 15	4½	42.50
BB-1808	9-15/16 x 11-1/16 x 11	4½	41.35
BB-1809	9-15/16 x 11-1/16 x 15	5	43.85

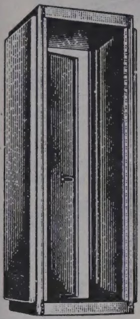
ALUMINUM CHASIS FOR SHOWCASE

Cat. 006-★	Fits #	Dimensions L" x W" x H"	Wgt. Lbs.	Net Each
BBC-1821	BB-1800-02-05	9-31/32 x 4-29/32 x 2	½	$2.75
BBC-1822	BB-1801-03-06	9-31/32 x 7-11/16 x 2	1	3.90
BBC-1823	BB-1804-08	9-31/32 x 10-15/32 x 2	1	3.90
BBC-1824	BB-1807	13-31/32 x 7-11/16 x 2	1	3.75
BBC-1825	BB1809	13-31/32 x 10-15/32 x 2	1¼	4.60

BUD PRESTIGE CABINETS

"PRESTIGE" RELAY RACKS

TAKES 19" PANELS ON ALL SIDES, QUICK, EASY ACCESS TO INTERIOR



Standard Prestige Racks consists of the framework, top, bottom, two ball-cornered sides and a ball-cornered door. The vertical members of the frame are drilled so standard 19" rack panels may be mounted on all four sides. Door and side clearance is sufficient to permit installation over equipment panels with no damage to controls or knobs. Sides are attached by a tongue and slot at the bottom and two screws at the top, may be easily removed for quick access to the interior. Doors may be hinged from left or right. Sides or doors may be used on all four sides of the framework. Bases have provision for adding castors. Racks may be bolted side-by-side for multiple units. Shipped knockdown. Hammertone gray finish only. Inside clearance 21-1/8" x 21-1/8". O'All depth: with door 23-1/16"; less door 22". O'All width: with side panels 24-1/8"; less panels 22".

Cat. No.	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-CR-2280	69-9/16"	61¼"	179	$170.85	$153.75	$136.70
6-CR-2281	71-13/16"	66½"	186	175.25	157.75	140.20
6-CR-2282	82-5/16"	77'	213	196.80	177.10	157.45

ACCESSORY DOORS

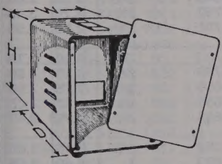
6-DR-2290	For CR-2280 rack	28	$ 20.05	$ 18.05	$ 16.05
6-DR-2291	For CR-2281 rack	33	23.45	21.10	18.75
6-DR-2292	For CR-2282 rack	39	26.30	23.65	21.05

ADD-A-RACK UNITS

For use with the Prestige Racks above. They consist of a framework, top, bottom, and one ball-cornered door. One side of the existing rack is moved to the outside of the new frame-work.

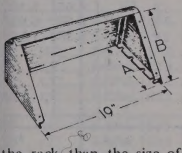
Cat. No.	Use	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-AR-2284	Adds to CR-2280	120	$129.25	$116.35	$103.40
6-AR-2286	Adds to CR-2281	125	139.70	125.75	111.75
6-AR-2287	Adds to CR-2282	136	156.80	141.10	125.45

PORTACABS



Attractive, versatile cabinets designed to house instrumentation requiring highly stylized appearance. Body is one piece .050" aluminum with contoured corners. Removeable .062" front panel is recessed ½", is held in place by #6 sheet metal screws. A flexible recessed handle permits easy portability as well as vertical stacking. Cabinet sides have inward pointed louvres which permit side-to-side placement without space loss. Rear cabinet opening 2" high. Equipped with four detachable rubber feet. With gray hammertone finish only.

Cat. No.	Dimensions D.	W.	H.	Use Chassis	Net Each 1-24	25-49	50-99
6-WA-1540	8"	6-1/8"	8"	AC-402	$13.25	$11.95	$10.60
6-WA-1541	12"	8-1/8"	9"	AC-407	17.30	15.55	13.85
6-WA-1542	8"	10-1/8"	8"	AC-406	15.45	13.90	12.35
6-WA-1543	18"	11-1/8"	11"	AC-416	21.45	19.30	12.15
6-WA-1544	18"	14-1/8"	12"	AC-420	24.65	22.20	19.70

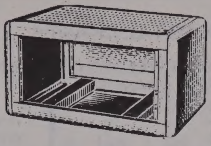


DUAL-VIEW

45° ANGLE PANEL SUPPORT

For use on racks or rack cabinets when an oblique view of an instrument panel is desired. The entire assembly occupies no more space on the rack than the size of the pane used. One side has notched flanges for attaching to the rack, the other side is drilled and tapped to accept the 19" rack panel. Made of 16 ga. steel with contoured edges. Available with black or gray rinkletex, light grey and light blue textured, white and sand textured, or gray hammertone finish. Specify color.

Cat. No.	For Panels A	B	Lbs. Wt.	Ea. 1-49	Ea. 50-99	Ea. 100-149
6-IP-1120	7"	7"	3½	$ 6.50	$ 5.85	$ 5.20
6-IP-1121	10½"	10½"	6¾	9.20	8.30	7.35

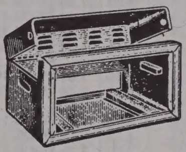


"PRESTIGE" BALL CORNERED

VERSA-CABINETS ALL SIDES REMOVABLE

Ball-cornered Prestige Cabinets are supplied as a framework with two ball-cornered sides, a perforated partial back, and a solid bottom with two chassis supporting rails. No top or front panel is supplied. The side brackets of the cabinet front and top are drilled and tapped to accept standard 19" rack panels. The back and bottom may be removed and replaced by 19" panels. Ball-cornered sides are attached by a bottom flange and a top nut for quick removal. Holes are provided for stacking cabinets or bolting them side-by-side. Bottom has rubber feet. Cabinet width: overall 23-3/16"; inside 22¼". Cabinet depth: overall 15¾"; inside 15". Top opening for 12¼" x 19" panels. Available in gray hammertone only.

Cat. No.	O'All Ht.	Panels Front	Rear	Lbs. Wt.	Ea. 1-14	Ea. 15-24	Ea. 25-34
6-PC-1700	8¾"	5¼"	3½"	27	$42.50	$38.25	$34.00
6-PC-1701	10½"	7"	5¼"	28¼	45.00	40.50	36.00
6-PC-1702	12¼"	8¾"	7"	32	46.15	41.55	36.90
6-PC-1703	14"	10½"	8¾"	33	52.20	47.00	41.75
6-PC-1704	15¾"	12¼"	10½"	34¾	55.00	49.50	44.00
6-PC-1710	Perforated top panel			2½	$ 4.20	$ 3.80	$ 3.35



"PRESTIGE"

STANDARD CABINETS

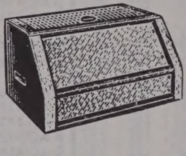
Hinged cover, available solid or perforated, swings back completely. Grommetted finger holes assure easy cover lifting. Cabinet is furnished with two supporting rails which can be moved laterally to accommodate any width chassis. Safety shielded end slots for carrying. Made of 16 ga. steel with gray hammertone finish only. Bottom has embossed feet. Overall width 21-5/8", depth 14¾". Inside depth 13-1/8". Rear opening 18" x 3". Cover opening 21-5/8" x 12¾". For standard 19" rack panels.

Cat. No.	Cover Type	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-24	Ea. 25-49	Ea. 50-99
6-C-1440	Solid	9-8/16"	7"	25	$42.90	$38.60	$34.30
6-C-1441	Solid	11-5/16"	8¾"	26	45.15	40.65	36.10
6-C-1442	Solid	13-1/16"	10½"	28½	47.10	42.40	37.70

Cat. No.	Cover Type	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-14	Ea. 15-24	Ea. 25-34
6-C-1550	Perf.	9-8/16"	7"	23½	$46.35	$41.70	$37.10
6-C-1551	Perf.	11-5/16"	8¾"	25	48.25	43.45	38.60
6-C-1552	Perf.	13-1/16"	10½"	27½	51.00	45.90	40.80

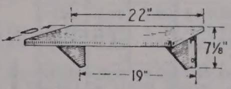
"PRESTIGE"

SLOPING PANEL CABINETS



Ventilated top opens completely. Shielded handles on cabinet ends for easy lifting. Panels recessed 1¼". Bottom vertical panel 3½" high. Sloping panel height listed below. Panel trim bar removable to permit installation or removal of panels with chassis attached. Rear opening 2½" high x 18". Cabinet top depth **9¼".** Furnished only with gray hammertone finish. Less standard 19" rack panels.

Cat. No.	O'All Ht.	Depth	Slope Panel	Lbs. Wt.	Ea. 1-14	Ea. 15-24	Ea. 25-34
6-C-1555	11-7/8"	14-3/8"	7"	25	$50.50	$45.45	$40.40
6-C-1556	13¼"	15-1/8"	8¾"	27	54.35	48.90	43.50
6-C-1557	14¾"	16-1/8"	10½"	30	58.30	52.45	46.65



RACK SHELF

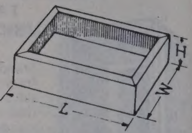
Mounts over 7" rack panel or directly to rack rails. Shelf is 16 ga. steel, supports 1/8" steel. Shelf thickness 5/8". Available with gray hammertone, black or gray **rinkletex finish.**

Cat. No.	Shelf D.	W.	Lbs. Wt.	Ea. 1-2	Ea. 3-4	Ea. 5-7
6-SA-1719	16"	22"	13¼	$13.85	$12.45	$11.10
6-SA-1720	20"	22"	15¼	14.00	12.60	11.20

BUD BLANK CHASSIS

BLANK METAL CHASSIS

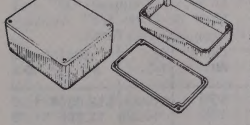
REINFORCED, SPOT-WELDED CONSTRUCTION



For consturcting electronic of electrical equipment. Chassis are formed from one piece of metal, with all four corners reinforced and spot welded. Sides are folded in ½" for additional rigidity, and to permit attaching a bottom plate to protect and shield internal components. Aluminum chassis formed of Alloy 5005 H-14 with natural gray finish.

Size			ALUMINUM CHASSIS NATURAL FINISH					STEEL CHASSIS ZINC PLATED FINISH					STEEL CHASSIS BLACK WRINKLE FINISH				
W.	L.	H.	Cat. No.	Ga.	Lbs. Wt.	Ea. 1-24	25-49	Cat. No.	Ga.	Lbs. Wt.	Ea. 1-24	25-49	Cat. No.	Ga.	Lbs. Wt.	Ea. 1-24	25-49
2½"	4½"	1"	6-AC-1401	18	1/8	$1.50	$1.35										
3½"	4½"	1"	6-AC-1402	18	1/8	1.60	1.45										
3½"	5½"	1"	6-AC-1403	18	1/8	1.60	1.45										
4"	5"	2"	6-AC-1404	18	1/4	1.90	1.70										
4"	6"	1½"	6-AC-1405	18	1/4	1.65	1.50										
4"	6"	3"	6-AC-430	18	1/3	2.10	1.90										
4"	6"	2"	6-AC-431	18	1/4	1.90	1.70										
4"	8"	2"	6-AC-1406	18	1/4	2.15	1.95										
4"	17"	3"	6-AC-432	16	1/8	3.65	3.30	6-CB-1066	20	2	$3.50	$3.10	6-CB-1068	20	2	$5.10	$2.80
4½"	8"	1½"	6-AC-1407	18	1/4	2.00	1.80	6-CB-102	22	5/8	2.50	2.25	....		......	....	....
5"	7"	2"	6-AC-402	18	1/3	2.00	1.80	6-CB-629	22	¾	2.15	1.95	6-CB-628	22	¾	1.85	1.65
5"	7"	3"	6-AC-429	18	1/2	2.25	2.05	....		......	....	....	....		......	....	....
5"	9"	1½"	6-AC-1408	18	1/3	2.00	1.80	6-CB-103	22	¾	2.35	2.10	....		......	....	....
5"	9½"	1½"	6-AC-1409	18	1/3	2.00	1.80	6-CB-776	22	1	2.85	2.55	6-CB-788	22	1	2.00	1.80
5"	9½"	2"	6-AC-403	18	1/2	2.15	1.95	....		......	....	....	....		......	....	....
5"	9½"	2½"	6-AC-401	18	1/2	2.50	2.25	6-CB-645	22	1¼	2.85	2.55	6-CB-644	22	1¼	2.35	2.10
5"	9½"	3"	6-AC-421	18	5/8	2.60	2.35	....		......	....	....	....		......	....	....
5"	10"	3"	6-AC-404	18	5/8	2.60	2.35	6-CB-605	22	1¼	3.10	2.80	6-CB-604	22	1¼	2.35	2.10
5"	13"	3"	6-AC-422	18	3/4	3.00	2.70	6-CB-105	20	2	3.65	3.30	....		......	....	....
5"	13½"	2½"	6-AC-1410	18	3/4	2.65	2.40	6-CB-1198	20	1¾	3.75	3.40	6-CB-647	20	1¾	3.00	2.70
5½"	5½"	1"	6-AC-1411	18	1/5	1.85	1.65	6-CB-101	22	½	2.35	2.10	....		......	....	....
5½"	9½"	1½"	6-AC-1412	18	1/3	2.00	1.80	....		......	....	....	....		......	....	....
6"	8"	2"	6-AC-1413	18	1/3	2.15	1.95	6-CB-104	20	1-1/8	2.50	2.25	....		......	....	....
6"	14"	3"	6-AC-1414	16	1-1/8	3.85	3.45	6-CB-756	20	2¼	3.40	3.05	6-CB-755	20	2¼	3.00	2.70
6"	17"	3"	6-AC-433	16	1¼	4.35	3.90	....		......	....	....	....		......	....	....
7"	7"	2"	6-AC-405	18	1/2	2.15	1.95	6-CB-1191	20	1¼	2.65	2.40	6-CB-789	20	1¼	2.15	1.95
7"	9"	2"	6-AC-406	18	1/2	2.25	2.05	6-CB-1192	20	1½	2.65	2.40	6-CB-790	20	1½	2.35	2.10
7"	11"	2"	6-AC-407	18	5/8	2.60	2.35	6-CB-1193	20	1-5/8	3.00	2.70	6-CB-791	20	1-5/8	2.40	2.15
7"	12"	3"	6-AC-408	18	7/8	3.15	2.85	6-CB-793	20	2¼	3.50	3.15	6-CB-792	20	2¼	2.65	2.40
7"	13"	2"	6-AC-409	18	3/4	2.65	2.40	6-CB-1194	20	1¾	3.15	2.85	6-CB-646	20	1¾	2.50	2.25
7"	15"	2"	6-AC-1415	16	1	3.50	3.15	....		......	....	....	....		......	....	....
7"	15"	3"	6-AC-411	16	1¼	4.35	3.90	6-CB-1189	20	2½	4.10	3.70	6-CB-649	20	2½	3.35	3.00
7"	17"	2"	6-AC-1416	16	1-1/8	3.90	3.15	....		......	....	....	....		......	....	....
7"	17"	2½"	6-AC-1417	16	1¼	4.10	3.70	6-CB-1199	20	2½	3.90	3.50	6-CB-648	20	2½	3.35	3.00
7"	17"	3"	6-AC-423	16	1½	4.35	3.90	6-CB-758	20	2¾	4.35	3.90	6-CB-757	20	2¾	3.75	3.40
8"	10"	2½"	6-AC-1418	18	1	3.25	2.95	6-CB-702	20	1¾	3.35	3.00	6-CB-701	20	1¾	2.85	2.55
8"	12"	2½"	6-AC-1419	16	1-1/8	3.85	3.45	6-CB-704	20	2¼	3.75	3.40	6-CB-703	20	2¼	3.00	2.70
8"	12"	3"	6-AC-424	16	1¼	4.60	4.15	6-CB-760	20	2½	3.90	3.50	6-CB-759	20	2½	3.10	2.80
8"	17"	2"	6-AC-425	16	1½	3.90	3.50	6-CB-774	20	2½	3.90	3.50	6-CB-650	20	2½	2.85	2.55
8"	17"	3"	6-AC-412	16	1¾	4.50	4.05	6-CB-775	20	3¼	4.35	3.90	6-CB-651	20	3¼	3.40	3.05
8½"	15"	3"	6-AC-1420	16	1½	4.15	3.75	6-CB-666	20	2¾	4.60	4.15	6-CB-665	20	2¾	3.75	3.40
9"	15"	3"	6-AC-1421	16	1½	4.75	4.30	....		......	....	....	....		......	....	....
10"	12"	3"	6-AC-413	16	1¼	4.50	4.05	6-CB-1195	20	2¾	4.00	3.60	6-CB-652	20	2¾	3.15	2.85
10"	14"	3"	6-AC-414	16	1½	4.50	4.05	6-CB-779	20	3	4.00	3.60	6-CB-653	20	3	3.40	3.05
10"	17"	2"	6-AC-415	16	1½	4.35	3.90	6-CB-769	20	2¾	4.00	3.60	6-CB-654	20	2¾	3.35	3.00
10"	17"	3"	6-AC-416	16	1¾	5.00	4.50	6-CB-637	20	3¾	4.75	4.30	6-CB-636	20	3¾	3.35	3.00
10"	17"	4"	6-AC-427	14	2½	7.10	6.40	6-CB-641	18	5½	6.00	5.40	6-CB-640	18	5½	5.35	4.80
10"	17"	3"	....		......	....	....	6-CB-1196	18	4¾	5.10	4.60	6-CB-655	18	4¾	4.25	3.85
10"	17"	5"	6-AC-1422	16	2¼	10.25	9.25	....		......	....	....	....		......	....	....
10"	23"	3"	6-AC-1423	14	2¾	7.50	6.75	6-CB-1197	18	5½	5.85	5.25	6-CB-656	18	5½	5.00	4.50
11"	17"	2"	6-AC-426	14	2	5.50	4.95	6-CB-770	18	4¼	4.65	4.20	6-CB-657	18	4¼	3.90	3.50
11"	17"	3"	6-AC-417	14	2¼	7.10	6.40	6-CB-771	18	5¼	5.90	5.30	6-CB-658	18	5¼	4.60	4.15
12"	12"	3"	6-AC-1424	16	1½	4.60	4.15	6-CB-106	18	4	5.25	4.75	....		......	....	....
12"	17"	2"	6-AC-1425	16	1-5/8	5.75	5.20	6-CB-661	18	4½	5.15	4.65	6-CB-663	18	4½	4.35	3.90
12"	17"	3"	6-AC-418	14	2¼	6.50	5.85	6-CB-662	18	5¼	6.15	5.55	6-CB-664	18	5¼	4.75	4.30
13"	17"	2"	6-AC-419	14	2-5/8	5.65	5.10	6-CB-772	18	5	6.25	5.65	6-CB-659	18	5	4.90	4.40
13"	17"	3"	6-AC-420	14	2¾	6.75	6.10	6-CB-773	18	5¾	6.95	6.25	6-CB-660	18	5¾	5.65	5.10
13"	17"	4"	6-AC-428	14	3¼	8.25	7.45	6-CB-643	18	6¾	7.95	7.15	6-CB-642	18	6¾	6.60	5.95
13"	17"	5"	6-AC-1426	14	3½	11.30	10.15	6-CB-626	18	7½	9.85	8.85	6-CB-625	18	7¼	8.35	7.50
14"	17"	3"	6-AC-1427	14	2¾	8.00	7.20	....		......	....	....	....		......	....	....
15"	17"	4"	6-AC-1428	14	3¼	11.25	10.15	....		......	....	....	....		......	....	....
15"	17"	6"	6-AC-1429	14	4-1/8	15.55	14.00	....		......	....	....	....		......	....	....
17"	17"	3"	6-AC-1430	14	3¼	9.50	8.55	....		......	....	....	....		......	....	....
17"	17"	4"	6-AC-1431	14	3-7/8	13.45	12.10	....		......	....	....	....		......	....	....

PRECISION DIE CAST BOXES



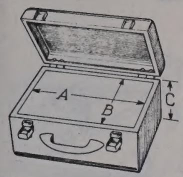
Sturdy, die-cast and lightweight. Made of LM-380 aluminum with flanged lids held to the body by screws into threaded bosses. They provide excellent screening for critical electronic or electrical assemblies.

Cat. No.	------Overall Size------			Wall	Lbs. Wt.	Ea. 1-24	25-49
	Lgth.	Width	Depth				
6-CU-124	4.375"	2.375"	1.063"	.063"	0.5	$1.85	$1.65
6-CU-234	4.688"	3.688"	2.063"	.094"	0.75	2.90	2.60
6-CU-247	7.390"	4.703"	2.063"	.094"	1.25	4.85	4.35
6-CU-347	7.390"	4.703"	3.063"	.094"	1.5	5.15	4.65

CU-247 and CU-347 have six bosses.

BUD CHASSIS & PLATES

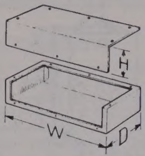
TRANSICABS'



Handsome, smoothly contoured portable instrument cases with chromium plated slide-off hinges, toggle catches and handle. Case and removeable panel fabricated from .040" aluminum, with small rubber feet on bottom and back. Lid has 1-15/32" inside clearance for knobs, dials etc. Inside case clearance approximately 1" less than panel size. Overall case size (less lid) approximately 1" larger than panel size. When ordering specify dark grey textured (GGY) or dark blue textured (BBY).

Cat. No.	Panel A	Panel B	Depth C	Lbs. Wt.	Ea. 1-9	Ea. 10-14
6-TC-300	8-15/16"	5-15/16"	4-13/32"	2½	$31.20	$28.10
6-TC-301	10-3/8"	7-1/4"	4-13/32"	3¼	32.15	28.95
6-TC-302	11-7/8"	7-15/16"	5-29/32"	4	34.30	30.85
6-TC-303	15-3/8"	7-15/16"	5-29/32"	4¾	34.90	31.40
6-TC-304	19"	7"	7-11/32"	6¾	36.80	33.10

CONVERTA–BOX
STEEL ENCLOSURES

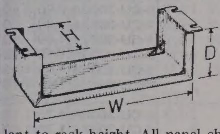


Versatile enclosures consisting of a welded steel base and two-sided cover which fasten together by means of self-tapping screws. They provide protection and shielding for small components, accept controls on every surface. Sturdily constructed of 20 ga. cadmium plated steel.

Cat. No.	Size H.	Size W.	Size D.	Lbs. Wt.	Ea. 1-24	Ea. 25-49	Ea. 50-99
6-CU-341	1½"	4"	3"	½	$2.85	$2.55	$2.30
6-CU-452	2"	5"	4"	¾	2.75	2.50	2.20
6-CU-482	2"	8"	4"	1¼	2.90	2.60	2.30
6-CU-592	2½"	9½"	5"	1¾	3.10	2.80	2.50
6-CU-622	2½"	12"	6"	2¾	3.40	3.05	2.70
6-CU-712	2½"	15"	7"	3	4.60	4.15	3.70

Prices are available for larger quantites of all Bud Products. Write for quatations and delivery.

PANEL CHASSIS
FOR VERTICAL MOUNTING

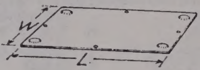


These chassis are primarily intended for vertical chassis installation where space in depth is limited or where front service is desired. Made of alloy 5005 H-14 aluminum with natural finish. Front flange has standard notchings suitable for mounting to a rack. Dimension "H" is equivalent to rack height. All panel chassis have a "W" dimension of 17" and a "D" dimension of 5-9/32". Other details given to the right.

Cat. No.	Panel Ht.	Ga.	Lbs. Wt.	Ea. 1-24	Ea. 25-49
6-CB-1370	1¾"	.062"	¾	$3.50	$3.15
6-CB-1371	3½"	.062"	1¼	3.90	3.50
6-CB-1372	5¼"	.062"	1½	4.35	3.90
6-CB-1373	7"	.062"	2	4.90	4.40
6-CB-1374	8¾"	.062"	2¼	6.90	5.30
6-CB-1375	10½"	.062"	2¾	6.95	6.25
6-CB-1376	12¼"	.062"	3	7.70	6.95
6-CB-1377	14"	.062"	3¼	8.45	7.60

CHASSIS BOTTOM PLATES

Bottom plates serve as dust covers and protect wiring and components on the underside of the chassis. Plates have four embossed feet to prevent sharp edges from damaging table top or other surface. Availabe in steel or aluminum as listed below.



ALUMINUM Natural Finish							STEEL Electro-Zinc Finish					STEEL Black Rinkletex Finish				
Size W.	Size L.	Cat. No.	Lbs. Wt.	Ea. 1-49	50-99	100-149	Cat. No.	Lbs. Wt.	Ea 1-49	50-99	100-149	Cat. No.	Lbs. Wt.	Ea. 1-49	50-99	100-149
2½"	4½"	6-BPA-1501	1/16	$0.85	$0.75	$0.70										
3½"	4½"	6-BPA-1502	1/16	.90	.80	.75										
3½"	5½"	6-BPA-1503	1/8	.90	.80	.75										
4"	5"	6-BPA-1504	1/8	.90	.80	.75										
4"	6"	6-BPA-1505	1/8	1.00	.90	.80										
4"	8"	6-BPA-1506	1/8	1.15	1.05	.90										
4"	17"	6-BPA-1532	1/4	1.15	1.05	.90	6-BP-1067	5/8	$1.85	$1.65	$1.50	6-BP-1069	5/8	$1.25	$1.15	$1.00
4½"	8"	6-PBA-1507	3/16	1.25	1.15	1.00										
5"	7"	6-BPA-1589	1/8	1.10	1.00	.90	6-BP-706	3/8	1.00	.90	.80	6-BP-705	3/8	.85	.80	.75
5"	9"	6-BPA-1508	3/16	1.10	1.00	.90										
5"	9½"	6-BPA-1590	1/8	1.10	1.00	.90	6-BP-667	3/8	1.10	1.00	.90	6-BP-680	3/8	1.00	.90	.80
5"	10"	6-BPA-1591	1/4	1.10	1.00	.90	6-BP-538	1/2	1.15	1.05	.90	6-BP-536	1/2	1.10	1.00	.90
5"	13"	6-BPA-1509	1/4	1.75	1.60	1.40										
5"	13½"	6-BPA-1510	1/4	1.75	1.60	1.40	6-BP-672	5/8	1.60	1.45	1.30	6-BP-685	5/8	1.15	1.05	.90
5½"	5½"	6-BPA-1511	1/8	1.10	1.00	.90										
5½"	9½"	6-BPA-1512	3/16	1.15	1.05	.90										
5"	8"	6-BPA-1513	3/16	1.25	1.15	1.00										
6"	14"	6-BPA-1514	5/16	1.75	1.60	1.40										
6"	17"	6-BPA-1515	3/8	2.10	1.90	1.70										
7"	7"	6-BPA-1592	3/16	1.10	1.00	.90	6-BP-668	1/2	1.60	1.45	1.30	6-BP-681	1/2	1.60	1.45	1.30
7"	9"	6-BPA-1593	1/4	1.15	1.05	.90	6-BP-669	5/8	1.60	1.45	1.30	6-BP-682	5/8	1.50	1.35	1.20
7"	11"	6-BPA-1594	1/4	1.25	1.15	1.00	6-BP-670	3/4	1.65	1.50	1.30	6-BP-683	3/4	1.50	1.35	1.20
7"	12"	6-BPA-1595	5/16	1.50	1.35	1.20	6-BP-539	3/4	1.90	1.70	1.50	6-BP-537	3/4	1.65	1.50	1.30
7"	13"	6-BPA-1596	1/2	1.75	1.60	1.40	6-BP-671	3/4	1.85	1.65	1.50	6-BP-684	3/4	1.50	1.35	1.20
7"	15"	6-BPA-1516	1/2	1.90	1.70	1.50						6-BP-684				
7"	17"	6-BPA-1517	1/2	1.80	1.70	1.50	6-BP-673	1–1/8	2.00	1.80	1.60	6-BP-686	1-1/8	1.35	1.20	1.10
8"	10"	6-BPA-1518	1/4	1.85	1.65	1.50	6-BP-708	5/8	1.65	1.50	1.30	6-BP-707	.5/8	1.25	1.15	1.00
8"	12"	6-BPA-1519	3/8	2.15	1.95	1.70	6-BP-710	7/8	1.90	1.70	1.50	6-BP-709	7/8	1.60	1.45	1.30
8"	17"	6-BPA-1520	1/2	2.25	2.05	1.80	6-BP-674	1-1/4	2.15	1.95	1.70	6-BP-687	1-1/4	1.50	1.35	1.20
8½"	15"	6-BPA-1521	1/2	2.65	2.40	2.10										
9"	15"	6-BPA-1522	1/2	2.75	2.50	2.20										
10"	12"	6-BPA-1523	1/2	2.15	1.95	1.70	6-BP-675	1	2.25	2.05	1.80	6-BP-688	1	1.50	1.35	1.20
10"	14"	6-BPA-1524	1/2	2.15	1.95	1.70	6-BP-514	1-1/2	2.15	1.95	1.70	6-BP-517	1-1/2	2.00	1.80	1.60
10"	17"	6-BPA-1597	5/8	2.15	1.95	1.70	6-BP-676	1-5/8	2.25	2.05	1.80	6-BP-689	1-5/8	1.75	1.60	1.40
10"	23"	6-BPA-1525	7/8	3.15	2.85	2.50										
11"	17"	6-BPA-1526	3/4	2.35	2.10	1.90	6-BP-677	1-3/4	2.25	2.05	1.80	6-BP-690	1-3/4	1.85	1.65	1.50
12"	12"	6-BPA-1527	5/8	2.35	2.10	1.90										
12"	17"	6-BPA-1528	3/4	2.90	2.60	2.30	6-BP-678	1-7/8	2.85	2.55	2.30	6-BP-691	1-7/8	2.00	1.80	1.60
13"	17"	6-BPA-1598	7/8	3.10	2.80	2.50	6-BP-679	2-1/4	3.15	2.85	2.50	6- BP-692	2-1/4	2.10	1.90	1.70
14"	17"	6-BPA-1529	15/16	3.10	2.80	2.50										
15"	17"	6-BPA-1530	1	4.15	3.25	3.30										
17"	17"	6-BPA-1531	1-1/16	4.25	3.85	3.40										

BUD METAL BOXES & CASES

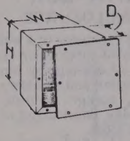


Fig. 1

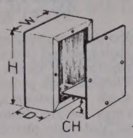


Fig. 2

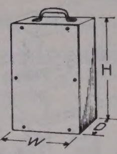


Fig. 3

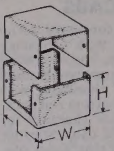


Fig. 4

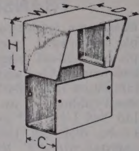


Fig. 5

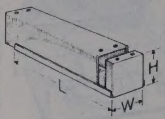


Fig. 6

UTILITY BOXES

Small metal boxes with removeable front and back panels for easy fabrication of electronic or electrical apparatus. Panels fasten to 3/8" body flanges by means of Nr. 6 sheet metal screws.

STEEL BOXES. Fig. 1.

Available with black rinkletex (BR) or gray hammertone (HG).

Black Cat. No.	Gray Cat. No.	Dimensions H.	W.	D	Lbs. Wt.	Ea. 1-49	Ea. 50-99
6-CU-883BR	6-CU-883HG	4"	4"	2"	¾	$1.65	$1.50
6-CU-728BR	6-CU-728HG	4"	5"	3"	1	2.00	1.80
6-CU-729BR	6-CU-729HG	6"	5"	4"	1¾	2.15	1.95
6-CU-1098BR	6-CU-1098HG	6"	6"	6"	2¼	3.40	3.05
6-CU-1099BR	6-CU-1099HG	9"	6"	5"	3	3.85	3.45
6-CU-879BR	6-CU-879HG	10"	8"	7"	3¼	5.25	4.75
6-CU-1124BR	6-CU-1124HG	12"	7"	6"	5	5.25	4.75
6-CU-880BR	6-CU-880HG	10"	10"	8"	6¼	6.15	5.55
6-CU-881BR	6-CU-881HG	12"	11"	8"	8½	6.75	6.10
6-CU-882BR	6-CU-882HG	15"	9"	7"	8¼	6.85	6.15

STEEL BOXES WITH CHASSIS

Similar to those above but front panel has small chassis attached. Chassis width 7/8" less than cabinet width, depth 1/8" less than cabinet depth. Chassis height (CH) above base given below. These boxes are supplied only in black rinkletex finish. Fig. 2.

Cat. No.	Dimensions H.	W.	D.	CH.	Lbs. Wt.	Ea. 1-49	Ea. 50-99
6-C-1793	4"	4"	2"	1"	¾	$1.90	$1.70
6-C-1794	4"	5"	3"	1"	1	2.25	2.05
6-C-1795	5"	4"	3"	1¼"	1	2.40	2.15
6-C-1796	6"	5"	4"	1¾"	1¾	2.60	2.35
6-C-1797	5"	6"	4"	1¼"	1¾	2.75	2.50
6-C-1798	6"	6"	6"	1¾"	2¾	3.60	3.25

ALUMINUM BOXES

Fig. 1. Available in natural aluminum or gray hammertone (HG) finish as listed below. Same dimensions as the steel box types referred to above.

Natural Cat. No.	Ea. 1-49	50-99	Same Size As	Gray Cat. No.	Ea. 1-49	50-99
6-AU-1083	$2.15	$1.95	6-CU-883	6-AU-1083HG	$2.50	$2.55
6-AU-1028	2.85	2.55	6-CU-728	6-AU-1028HG	2.85	2.55
6-AU-1029	2.50	2.25	6-CU-729	6-AU-1029HG	3.00	2.70
6-AU-1039	3.65	3.30	6-CU-1098	6-AU-1039HG	4.00	3.60
6-AU-1040	4.15	3.75	6-CU-1099	6-AU-1040HG	5.00	4.50

CARRYING CASES

With easy-grip handle for portable uses. Front and back panels held by #6 sheet metal screws. See Fig. 3.

STEEL CARRYING CASES

Supplied with black wrinkle (B) or gray hammertone (HG) finish.

Black Cat.	Gray Cat.	Dimensions H.	W.	D.	Lbs. Wt.	Ea. 1-24	Ea. 25-49
6-CC-1095BR	6-CC-1095HG	9"	6"	5"	3	$4.85	$4.35
6-CC-1091BR	6-CC-1091HG	6"	9"	5"	3	4.85	4.35
6-CC-1096BR	6-CC-1096HG	12"	7"	5"	5¼	6.70	6.05
6-CC-1092BR	6-CC-1092HG	7"	12"	6"	5	6.70	6.05
6-CC-1097BR	6-CC-1097HG	15"	7¾	7"	7¼	7.50	6.75
6-CC-1100BR	6-CC-1100HG	10"	10"	8"	7	7.70	6.95
6-CC-1093BR	6-CC-1093HG	9"	15"	7"	8	3.00	2.70

ALUMINUM CARRYING CASES

Fig. 3. Available in natural aluminum or light gray hammertone (HG) finish as listed below. Same dimensions as the steel carrying cases referred to above.

Natural Cat. No.	Ea. 1-24	25-49	Same Size As	Gray Cat. No.	Ea. 1-24	25-49
6-ACC-2095	$4.90	$4.40	6-CC-1095	6-ACC-2095HG	$5.60	$5.05
6-ACC-2091	4.90	4.40	6-CC-1091	6-ACC-2091HG	5.60	5.05
6-ACC-2096	7.50	6.75	6-CC-1096	6-ACC-2096HG	8.60	7.75
6-ACC-2092	7.50	6.75	6-CC-1092	6-ACC-2092HG	8.60	7.75

MINI-BOXES Fig. 4.

Multi-purpose boxes featuring two-piece construction, each half framing three sides to permit installation of more components than conventional designs. Quick assembly feature uses projections on one half which snap into holes on the other half. Projections may be knocked out and screws substituted for permanent locking. Wide flanges assure proper shielding. Made of aluminum with gray hammertone natural finish as listed below.

Gray Cat. No.	Ea. 1-49	50-99	Dimensions L."	H."	W."	Natural Cat. No.	Ea. 1-49	50-99
6-CU-2100A	$1.10	1.00	2¾	2-1/8	1-5/8	6-CU-3000A	0.90	0.80
6-CU-2101A	1.10	1.00	3¼	2-1/8	1-5/8	6-CU-3001A	.90	.80
6-CU-2102A	1.15	1.05	4	2-1/8	1-5/8	6-CU-3002A	1.00	.90
6-CU-2103A	1.25	1.15	4	2-1/4	2-1/4	6-CU-3003A	1.15	1.05
6-CU-2104A	1.40	1.25	5	2-1/4	2-1/4	6-CU-3004A	1.25	1.15
6-CU-2105A	1.75	1.60	5	4	3	6-CU-3005A	1.25	1.15
6-CU-2106A	1.50	1.35	5¼	3	2-1/8	6-CU-3006A	1.25	1.15
6-CU-2107A	2.15	1.95	6	5	4	6-CU-3007A	1.75	1.60
6-CU-2108A	2.50	2.25	7	5	3	6-CU-3008A	2.15	1.95
6-CU-2109A	3.25	2.95	8	6	3-1/2	6-CU-3009A	2.85	2.55
6-CU-2110A	3.60	3.25	10	6	3-1/2	6-CU-3010A	3.00	2.70
6-CU-2111A	4.85	4.35	12	7	4	6-CU-3011A	4.25	3.85
6-CU-2112A	4.85	4.35	17	5	4	6-CU-3012A	4.25	3.85
6-CU-2113A	1.85	1.65	10	2	1-5/8	6-CU-3013A	1.65	1.50
6-CU-2114A	2.40	2.15	12	2-1/2	2-1/4	6-CU-3014A	2.10	1.90
6-CU-2115A	1.25	1.15	4	2	2-3/4	6-CU-3015A	1.15	1.05
6-CU-2116A	1.25	1.15	4¼	2-1/4	1-1/2	6-CU-3016A	1.15	1.05
6-CU-2117A	1.25	1.15	3¼	2-1/8	1-1/8	6-CU-3017A	1.00	.90

HANDY-BOXES. (Fig. 4)

Similar in construction to Mini-Boxes above but made of 22 gauge steel finished in black wrinkle only. Held together by screws.

Cat. No.	Dimensions L.	W.	H.	Lbs. Wt.	Ea. 1-49	Ea. 50-99	100-149
6-HB-1621	4¼"	2¼"	1½"	½	$2.10	$1.90	$1.70
6-HB-1622	4"	2"	2¾"	½	2.10	1.90	1.70

MINI-SLIDES. Fig. 6.

Sliding cover provides easy access to interior. Provides adequate shielding and dust protection. Fabricated from .050" aluminum. Available with gray hammertone or natural finish as listed below. Fastening is by means of four self-tapping screws.

Gray Cat. No.	Ea. 1-49	50-99	Dimensions L."	H."	W."	Natural Cat. No.	Ea. 1-49	50-99
6-MS-2150	$5.40	$4.85	13"	2-5/8	3-1/8	6-MS-3050	$4.00	$3.60
6-MS-2151	6.10	5.50	13"	2-5/8	5-1/8	6-MS-3051	4.90	4.40
6-MS-2152	5.90	5.30	17"	2-5/8	3-1/8	6-MS-3052	4.75	4.30

COWL-TYPE MINI-BOXES: Fig. 5.

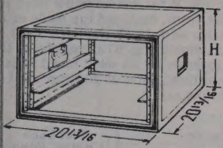
Two-piece, three-side construction but with a projecting top cover which reduces glare on the panel from overhead lighting and provides protection for controls and dials. Cover section has internal braces to which bottom, front and back fasten by means of self-tapping screws. Fabricated from .050" aluminum. Available with gray hammertone or natural finish as listed below.

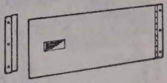
GRAY HAMMERTONE FINISH

Cat. No.	Dimensions H.	W.	D.	C.	Lbs. Wt.	Ea. 1-49	Ea. 50-99
6-SC-2130	6"	10"	7"	5-3/16"	1¼	$8.70	$7.85
6-SC-2131	7"	12"	8"	5-59/64"	1½	9.45	8.50
6-SC-2132	3"	8"	5"	3-63/64"	1	5.00	4.50
6-SC-2133	5"	5"	5"	3-29/64"	1	5.10	4.60
NATURAL FINISH							
6-SC-3030	6"	10"	7"	5-3/16"	1¼	$6.25	$5.65
6-SC-3031	7"	12"	8"	5-59/64"	1½	6.75	6.10
6-SC-3032	3"	8"	5"	3-63/64"	1	3.60	3.25
6-SC-3033	5"	5"	5"	3-29/64"	1	3.75	3.40

BUD METAL CABINETS

CLASSIC II CABINETS





Rectilinear outlines combine with innovative construction features to meet the demands of the most critical user. The rugged frame is made of 6063-T5 aluminum extrusions, with a double rim effect on the front. This is polished to provide an interesting frame for the components on the panel. The top, sides and bottom panel are of .060" aluminum. Two vertically adjustable chassis supports are provided. Front and rear mounting rails are tapped 10-32 W.E. spacing for standard 19" rack panels, or for Classic II Doors. Doors have hinge and lock. Classic II Cabinets and Doors listed here are Gray textured in color. Royal Blue textured (RB), Gold textured (GD) also available. Doors are white (WH) or sand (S) finish.

CLASSIC II CABINETS

iray Textured at. No.	O'All Ht.	Panel Space	Lbs. Wt.	Ea. 1-2	Ea. 3-4
-AGC-9267-GT	7-1/16"	5-5/16"	29.25	$95.25	$85.75
-AGC-9268-GT	8-13/16"	7-1/16"	30.50	100.40	90.35
-AGC-9269-GT	10-9/16"	8-13/16"	32.25	102.80	92.50
-AGC-9270-GT	12-5/16"	10-9/16"	33.25	106.25	95.65
-AGC-9271-GT	14-1/16"	12-5/16"	34.25	110.55	99.50
-AGC-9272-GT	15-13/16"	14-1/16"	35	113.90	102.50
-AGC-9273-GT	17-9/16"	15-13/16"	36	118.25	106.45
-AGC-9274-GT	19-5/16"	17-9/16"	36.75	121.70	109.55
-AGC-9275-GT	21-1/16"	19-5/16"	37.75	124.35	111.90
-AGC-9276-GT	22-13/16"	21-1/16"	38.50	128.45	115.60
-AGC-9277-G'	24-9/16"	22-13/16"	39.50	131.90	118.70
-AGC-9278-GT	26-5/16"	24-9/16"	40.25	135.60	122.05
-AGC-9279-GT	28-1/16"	26-5/16"	41.25	139.05	125.15
-AGC-9280-GT	29-13/16"	28-1/16"	42	141.95	127.55

Gray Textured Cat. No.	Door Ht. x W.	Lbs. Wt.	Ea. 1-4	Ea. 5-9
6-AGD-367-GT	5¼"x 19"	1.75	$9.60	$8.65
6-AGD-368-GT	7" x 19"	2.0	11.15	10.05
6-AGD-369-GT	8¾"x 19"	2.75	12.30	11.05
6-AGD-370-GT	10½"x 19"	3.0	13.50	12.15
6-AGD-371-GT	12¼" x 19"	3.50	14.45	13.00
6-AGD-372-GT	14" x 19"	4	14.75	13.30
6-AGD-373-GT	15¾"x 19"	4.75	16.70	15.05
6-AGD-374-GT	17½" x 19"	5	18.05	16.25
6-AGD-375-GT	19¼"x 19"	5.50	19.35	17.40
6-AGD-376-GT	21" x 19"	6.25	20.60	18.55
6-AGD-377-GT	22¾" x 19"	6.75	21.60	19.45
6-AGD-378-GT	24½" x 19"	7.25	22.55	20.30
6-AGD-379-GT	26¼" x 19"	7.5	23.90	21.50
6-AGD-380-GT	28" x 19"	8.0	25.55	23.00

INSTRUMENT CABINETS

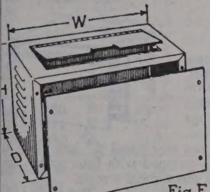


Fig. E

Designed for electronic or electrical equipment or assemblies not requiring excessive depth. Recessed top covers have piano type hinges and convenient finger lift. Economy Models (Fig. E.) have solid back and removeable front panel which mounts flush with cabinet front. Body is made from 20 ga. steel, panel 18 ga. (*16 ga.) steel. Economy cabinets finished in black rinkletex only. Streamlined Cabinets (Fig. F) have 3½" high rear opening for cables, connectors, etc. Corners are rounded and have vertical embossed trim lines. Panels fit flush with edges of rounded corners. Body made of 20 ga. steel panels of 18 ga. steel. Available with black rinkletex (BR), gray rinkletex (GR), or gray hammertone (GH) finish as listed below.

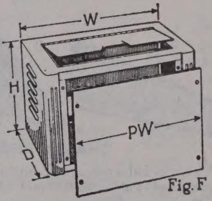


Fig. F

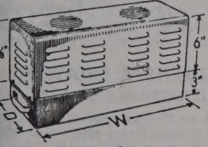
ECONOMY MODELS. Fig. E.

at. o.	Cabinet			Top Opening	Lbs. Wt.	Chassis To Fit	Net Each		
	H.	W.	D.				1-24	25-49	50-99
C-973	7"	8"	8"	5¾" x 5-9/16"	4¾	AC-405, CB-789, CB-1191	$6.85	$6.15	$5.50
C-993	7"	10"	8"	5¾" x 7½"	5	AC-406, CB-790, CB-1192	7.95	7.15	6.35
C-994	7"	12"	8"	5¾" x 9-9/16"	6	AC-407, CB-791, CB-1193	8.20	7.40	6.55
C-995	7"	14"	8"	5¾" x 11-9/16"	7½	AC-409, CB-648, CB-1194	8.65	7.80	6.90
C-1190*	8"	16"	8"	5¾" x 13-9/16"	8½	AC-411, CB-649, CB-1189	12.30	11.05	9.85
C-975*	9"	15"	11"	8¾" x 12-9/16"	12¼	AC-414, CB-653, CB-779	14.95	13.45	11.95
C-999*	12"	18"	12"	10-11/16" x 16-1/16"	18¼	AC-426, AC-417, CB-657, CB-658, CB-770, CB-771	16.30	14.65	13.05

STREAMLINED MODELS. Fig. F.

Black at. No.	Gray Cat. No.	"HG" Cat. No.	Cabinet				Top Opening	Chassis To Fit	Net Each		
			H.	W.	D.	PW.			1-24	25-49	50-99
CD-1480B	6-CD-1480G	6-CD-1480HG	8"	10-1/2"	8¼"	8"	5-5/8" x 7-7/8"	AC-405, CB-789, CB-39	$9.20	$8.30	$7.35
CD-1481B	6-CD-1481G	6-CD-1481HG	8"	12-1/2"	8¼"	10"	5-5/8" x 9-1/8"	AC-406, CB-790, CB-976	9.25	8.35	7.40
CD-1482B	6-CD-1482G	6-CD-1481HG	8"	14-1/2"	8¼"	12"	5-5/8" x 11½"	AC-407, CB-791, CB-997	9.95	8.95	7.95
CD-1483B	6-CD-1483G	6-CD-1483HG	8"	16-1/2"	8¼"	14"	5-5/8" x 13-1/8"	AC-409, CB-646, CB-998	10.70	9.65	8.55
CD-1484B	6-CD-1484G	6-CD-1484HG	8"	18-1/2"	8¼"	16"	5-5/8" x 15-7/8"	AC-411, CB-649, CB1189	11.35	10.20	9.10
CD-1485B	6-CD-1485G	6-CD-1485HG	12"	20-5/8"	12"	18"	10½" x 15½"	AC-426, AC-417, CB-657	22.20	20.00	17.75

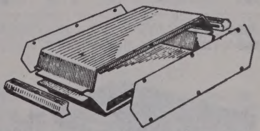
AMPLIFIER FOUNDATIONS



Removeable, 22 ga. louvred steel top. 20 ga. bottom chassis has comfortable grip handles. *Add suffix –BR or –GR to catalog number to indicate black or gray rinkletex finish.

at. lo.	Size W.	D.	Lbs. Wt.	Ea. 1-24	25-49	50-99
-CA-1750*	10-1/16"	5"	4¾"	$11.00	$9.90	$8.80
-CA-1751*	12-1/16"	7"	5	13.00	11.70	10.40
-CA-1752*	17-1/16"	7"	8	13.95	12.55	11.15
-CA-1753*	17-1/16"	10"	9	15.00	13.50	12.00

GRAND PRIX CABINETS

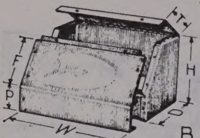


For electronic control apparatus. Made of 20 ga. aluminum. Extrusions lock body segments. Panels fasten with screws. *Add suffix –HG for gray hammertone, –GGY for dark gray textured with light gray panels.

Cat. No.	O'All Size H.	W.	D.	Lbs. Wt.	Ea. 1-14	15-24	25-49
6-MD-1*	4-1/8"	19-1/4"	10½"	7¼	$21.20	$19.10	$16.95
6-MD-2*	7-1/8"	19-1/4"	10½"	7¾	22.20	20.00	17.75
6-MD-3*	4-1/8"	12-1/4"	8¾"	7	17.10	15.40	13.70

BUD CABINETS & CASES

SLOPING PANEL CABINETS



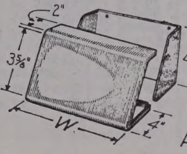
B

For use in constructing small electronic or electrical control apparatus. Fig. B has a removeable front panel for easy fabrication, and a hinged lid for access after fabrication. Sides, front, back and top made of 20 gauge steel, bottom of 22 gauge steel. *Made of 18 gauge steel. Available with black rinkletex (BR) or gray hammertone (HG) finish as listed below. Universal Sloping Panel Cabinets (Fig. B) are similar to the popular Mini-Boxes and use a two-piece, three-sided construction held together by #6 sheet metal screws. Lip on the top-front-bottom acts as a seal to exclude dust, dirt and moisture. Made of 20 gauge steel or .040" aluminum. Available only with gray hammertone finish as listed below.

STEEL CABINETS, Fig. B.

Black Cat. No.	Gray Cat. No.	Cabinet Dimensions H.	W.	D.	T.	F.	P.	Lbs. Wt.	Chassis To Fit	Net Each 1-24	25-49	50-99
6-C-1584B	6-C-1584HG	6½"	7-1/16"	7-9/32"	4-9/32"	4-47/64"	2-17/64"	2¾		$5.15	$4.65	$4.10
6-C-1587B	6-C-1587HG	8"	8-1/16"	8"	4-27/32"	5-17/32"	2-3/4"	4	AC-405, CB-790	6.85	6.15	5.50
6-C-1585B	6-C-1585HG	6½"	9-1/16"	7-9/32"	4-9/32"	4-47/64"	2-17/64"	2½		5.65	5.10	4.50
6-C-1588B	6-C-1588HG	8"	10-1/16"	8"	4-27/32"	5-17/32"	2-3/4"	4½	CB-976, AC-406, CB-790	7.60	6.85	6.10
6-C-1586B	6-C-1586HG	6½"	11-1/16"	7-9/32"	4-9/32"	4-47/64"	2-17/64"	3¾		6.60	5.95	5.30
6-C-1894B	6-C-1894HG	8"	14-1/16"	8	4-27/32"	5-17/32"	2¾"	6	CB-998, AC-409, CB-646	7.95	7.15	6.35
6-C-1892B	6-C-1892HG	8"	13-1/16"	8-15/32"	5-11/32"	5-17/32"	2¾"	5½	CB-997, AC-407, CB-791	8.85	7.95	7.10
6-C-1896B*	6-C-1896HG*	9"	18-1/16"	8-1/4"	4-3/8"	6-7/64"	3-13/32"	9¾	AC-425, CB-650, CB-774	11.20	10.10	8.95
6-C-1893B*	6-C-1893HG*	10"	18-1/16"	10-1/2"	6-3/4"	7"	3-13/32"	12½	AC-415, CB-654, CB-769	11.60	10.45	9.30

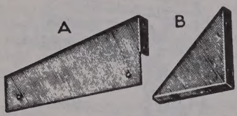
UNIVERSAL CABINETS. FIG. A



A

STEEL CABINETS Gray Cat. No.	Lbs. Wt.	NET EACH 1-49	50-99	100-149	Dim. "W"	ALUMINUM CABINETS Gray Cat. No.	Lbs. Wt.	NET EACH 1-49	50-99	100-149
6-C-1606	1	$2.25	$2.05	$1.80	4"	6-AC-1610	3/8	$2.85	$2.55	$2.30
6-C-1607	1	2.35	2.10	1.90	5"	6-AC-1611	1/2	2.75	2.50	2.20
6-C-1608	1¼	2.60	2.35	2.10	6"	6-AC-1612	9/16	3.00	2.70	2.40
6-C-1609	1½	3.00	2.70	2.40	7"	6-AC-1613	5/8	3.35	3.00	2.70

BRACKETS



Used to insure the proper support of heavily loaded chassis. Made of heavy gauge steel and furnished in pairs. Available only with oxford gray primer.

CHASSIS BRACKETS (Fig. A)

Flange is cut away at the bottom so chassis will mount flush with the panel. Types MB-450 and MB-451 are for 4" deep chassis.

Cat. No.	Bkt. Ht.	Bkt. Depth	Lbs. Wt.	Prs. 1-49	Prs. 50-99	100-149
6-MB-458	6½"	8"	1¼	$2.00	$1.80	$1.60
6-MB-448	6½"	10"	1¾	2.00	1.80	1.60
6-MB-459	6½"	11"	2	2.35	2.10	1.90
6-MB-449	6½"	12"	2	2.65	2.40	2.10
6-MB-460	6½"	13"	2½	2.50	2.25	2.00
6-MB-450	8½"	10"	2¼	3.00	2.70	2.40
6-MB-451	8½"	13"	3	3.15	2.85	2.50

TRIANGULAR BRACKETS (Fig.B)

To provide rigid support. Made of heavy steel with ¾" flanges.

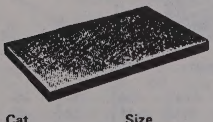
Cat. No.	Bkt. Ht.	Bkt. Depth	Lbs. Wt.	Prs. 1-49	Prs. 50-99	100-149
6-MB-1266	5"	5"	½	$1.60	$1.45	$1.30
6-MB-1267	7"	7"	1	1.85	1.65	1.50
6-MB-1268	9"	9"	1½	2.35	2.10	1.90

SUPPORT ANGLES

Use on inner sides of closed racks to help support heavily loaded chassis. 7/64" steel. Black only.

Cat. No.	Size H. x W. x D.	Lbs. Wt.	Prs. 1-24	Prs. 25-49	Prs. 50-99
6-SA-1349	3" x 1-3/8" x 14½"	3½	$3.60	$3.25	$2.90
6-SA-1350	3" x 1-3/8" x 12"	3	3.60	3.25	2.90

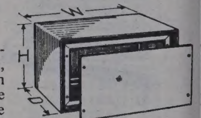
RACK SHELVES



Made of heavy gauge steel with a 1" flange for strength and rigidity. Uses with the Support Brackets describes above. Oxford gray primer only.

Cat. No.	Size H. x W. x D.	Lbs. Wt.	Ea. 1-9	Ea. 10-14	Ea. 15-19
6-CB-1976	1" x 19" x 15"	6	$94.00	$84.60	$75.20
6-CB-1977	1" x 19" x 12"	5	115.55	104.00	92.45

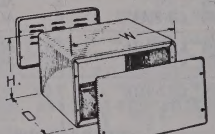
SHADOW CABINET



With front panel recessed 1" for protection of controls, knobs, switches, etc. Front and rear panels and bottom are removeable. Panels are 16 gauge steel. Body and bottom are 18 gauge steel. Finish is gray hammertone. Front panel is 1-5/16" less, and the rear panel ¼" less, than the cabinet "W" and "H". Bottom is equipped with four rubber feet. Panels and bottom attached by #6 sheet metal screws.

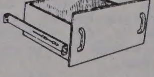
Cat. No.	Dimensions W.	H.	D.	Lbs. Wt.	Net Each 1-24	25-49	50-99
6-SB-2140	14¼"	8"	10"	11½	$11.35	$10.20	$9.10
6-SB-2141	13¼"	7½"	9"	9¾	9.00	8.10	7.20
6-SB-2142	17"	9½"	11½"	15¼	15.05	13.55	12.05
6-SB-2143	15½"	6"	9"	9½	8.50	7.65	6.80

CONTOUR CABINET



With rounded, contoured corners on cabinet and panels. Removeable solid front panel and louvred rear panel. Panel edges are curved on a 3/16" I.D. radius, add 5/16" total to the "D" dimension of the cabinet. Panels are 5/16" less than the "H and "W" cabinet dimension. Panels are attached by means of 6-32 screws and Tinnerman nuts. Body finish dark gray texture Panels finished in contrasting light gray texture. With rubber feet.

Cat. No.	Dimensions H.	W.	D.	Lbs. Wt.	Net Each 1-24	25-49
6-CU-463	4¼"	6¼"	3¾"	1½	$6.95	$6.2
6-CU-465	4¼"	6¼"	5¾"	2	7.85	7.0
6-CU-585	5¼"	8¼"	5¾"	3	10.10	9.1
6-CU-587	5¼"	8¼"	7¾"	3½	11.10	10.0
6-CU-7125	7¼"	12¼"	5¾"	5	10.25	9.2
6-CU-7127	7¼"	12¼"	7¾"	5¾	10.75	9.7



UNIVERSAL DRAWER
ADJUSTABLE SLIDES

Designed to fit any cabinet rack using 19" rack panels. Nylon roller slide brackets are adjustable for cabinet depths from 16½" to 24¼", fasten to front and rear panel mounting rails. Drawer size (inside) 16-19/32" x 16-11/32" x 16-13/64". Shpg. wt. 19½ lbs. Available with HG (Gray Hammertone), BR (Black Rinkletex) or GR (Gray Rinkletex) finish. Specify color when ordering.

Cat. 6-D-1721

Net Each, 1 to 2 Units	**$52.95**
Net Each, 3 to 4 Units	**$47.65**

BUD SLIDES & HANDLES

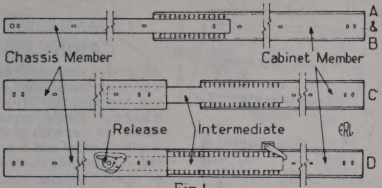


Fig.1

PRECISION SLIDES

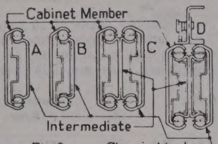
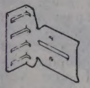
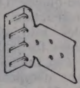


Fig 2

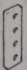
Precision two and three member telescoping slide mechanisms for use with drawers, chassis, or other assemblies which must be with-drawn from closed cabinets for inspection or service. Slide members are precision formed of bright electro-zinc plated cold rolled steel. Nickel plated carburized steel ball bearings are set in special retainers which keep them evenly spaced for smooth, finger-tip operation. Lubricant is life-long high-low temperature grease. All models have a positive stop at full extension. Models AS-5000/1/2 are equipped with delrin balls at front of cabinet member for stabilization of closed position. Models AS-5040/1/2 have provision for removing chassis member from slide without special tools. Overall slide height 1.390". Width: 2-member .375"; 3-member .750". Brackets and bar-nuts are available for mounting slides to cabinet sides.



Rear Bkt.



Front Bkt.

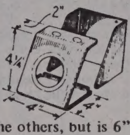


Bar Nut

Cat. No.	See Figs.	Slide Lgth.	Slide Travel	Lbs. Load	Lbs. Wt.	Prs. 1-4	Prs. 5-9
6-AS-5060	B	12.00"	9.00"	135	1.75	$9.95	$8.95
6-AS-5061	B	16.00"	12.00"	104	2.00	10.70	9.65
6-AS-5062	B	20.00"	15.00"	73	2.50	11.30	10.15
6-AS-5000	A	12.00"	9.00"	135	1.75	10.85	9.75
6-AS-5001	A	16.00"	12.00"	104	2.00	12.60	11.35
6-AS-5002	A	20.00"	15.00"	73	2.50	13.70	12.35
6-AS-5020	C	12.00"	12.88"	175	3.25	25.80	23.20
6-AS-5021	C	16.00"	16.88"	160	4.25	28.65	25.80
6-AS-5022	C	20.00"	20.00"	140	5.25	30.95	22.85
6-AS-5040	D	12.00"	11.88"	100	3.25	34.20	30.80
6-AS-5041	D	16.00"	15.88"	100	4.25	37.05	33.35
6-AS-5042	D	20.00"	19.88"	94	5.25	39.60	33.65

	MOUNTING ACCESSORIES	Ea.	Ea.
6-BAS-5103	Rear mtg. bracket for AS-5040/1/2	$1.40	$1.25
6-BAS-5102	Front mtg. bracket for AS-5040/1/2	1.40	1.25
6-BAS-5101	Rear mtg. bracket for all other models	1.40	1.25
6-BAS-5100	Front mtg. bracket for all other models	1.40	1.25
6-BAS-5110	Rail bar-nut for all models	1.40	1.25

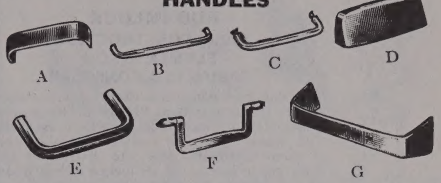
METER CASE

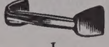


Universal punching accepts 2" meter as furnished, or 3" meter by removing knock-out ring. Two-pieces, three-sided construction for greatest accessibility to interior. 3/8" knock-outs on top for binding posts. Uses 4 sheet metal screws. Gray hammertone finish. Model CMA-1930 is the same height and depth as the others, but is 6" wide to accommodate other components.

Cat. No.	Made Of	Lbs. Wt.	Ea. 1-49	Ea. 50-99	100-149
6-CM-1935	20 gauge steel	¾	$2.10	$1.90	$1.70
6-CMA-1936	.040" aluminum	¼	2.40	2.15	1.90
6-CMA-1930	.040" aluminum	½	4.10	3.70	3.30

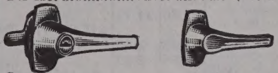
HANDLES





For rugged applications on Bud or other cabinets. Supplied in pairs with mounting screws or nuts. Under "Dimensions" A indicates stock material, B mounting centers and C the hand or fingers clearance. Other sizes and styles are also available. Complete descriptive information will be furnished when requested.

Cat. No.	See Fig.	Dimensions A	Dimensions B	Dimensions C	Net pairs 1-49	Net pairs 50-99
6-H-9102	A	5/8" x ¼"	4"	1"	$6.50	$5.85
6-H-9103	A	5/8" x ¼"	6"	1"	7.00	6.85
Made of solid brass, chrome plated. With 6-32 x ½" screws.						
6-H-9110	B	3/8" rod	6"	1¼"	5.65	5.10
6-H-9111	B	3/8" rod	4"	1"	3.00	2.70
6-H-9112	B	3/8" rod	6"	1"	3.40	3.05
6-H-9113	B	3/8" rod	8"	1"	3.85	3.45
Made of steel rod, chrome plated. With 10-32 x ½" or (*) 1/4-28 x ½" mounting screws.						
6-H-9115	C	3/8" rod	4"	15/16"	4.75	4.30
6-H-9116	C	3/8" rod	6"	15/16"	5.35	4.80
6-H-9161	C	3/8" rod	5¼"	1-11/16"	5.85	5.25
6-H-9165	C	3/8" rod	12¼"	1-11/16"	7.75	7.00
Made of steel rod, chrome plated. With ¼"-28 hex nuts.						
6-H-9140	D	Die cast	3½"	¾"	4.25	3.85
Die-cast aluminum, silver anodized. With 10-32 x ½" screws.						
6-H-9166	E	¼" rod	1-29/32"	1"	2.40	2.15
6-H-9168	E	¼" rod	3"	1"	2.60	2.35
Made of brass rod, chrome plated. With 6-32 screws.						
6-H-9122	F	Hinged	7¼"	1½"	12.45	11.20
Die-cast aluminum, silver, anodized. Hinged on ¼" steel pins with 2 hinge blocks. With 10-32 x 3/8" screws.						
6-H-9151	G	Die-cast	5-5/32"x5/8"	1-3/8"	9.95	8.95
Die-cast aluminum, silver anodized. With 10-32 x ½" screws.						
6-H-9150	I	Die-cast	4" x 5/8"	1¼"	6.10	5.50
Die-cast aluminum, silver anodized. With 10-32 x ½" screws.						



RACK DOOR HANDLES

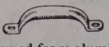
Chrome-plated, diecast handle and face plate. Corrosion resistant steel spindle and cam.

Cat. No.	Handle Description	Lbs. Wt.	Ea. 1-49	Ea. 50-99	100-149
6-H-3360	Non-locking type	¼	$5.65	$4.10	$4.50
6-HL-3361	With lock and key	¼	8.70	7.85	6.95

FLUSH HANDLE & CATCH

Standard on many Bud Cabinet Racks. Flush mounting. Exposed parts chrome plated.

Cat. 6-H-9347 **Net Each 1 to 49 $1.75, 50 to 99 $1.60**

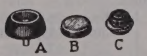


SMALL CABINET HANDLES

For small cabinets or housings. Smoothly formed from aluminum tubing and etch finished. With mtg. screws

Cat. No.	O'All Lgth.	Mtg. Ctrs.	Oz. Wt.	Net Each 1-49	Net Each 50-99	100-149
6-UH-70A	5-1/8"	4-5/8"	2	$0.75	$0.70	$0.60
6-UH-71A	3-3/4"	3-1/4"	1	.65	.60	.50

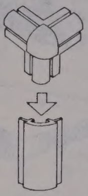
RUBBER FEET



For cabinets boxes, etc. F-7264A is black rubber, dia. 15/16", ht. 3/8", with 6-32 machine screw, washer and nut. F-8038 is a ¾" dia x 1/8" thick sponge rubber pad with a glue coating on one side. F-9653 is gray rubber, snap-mounted in a 7/16" hole.

Cat. No.	See Fig.	Made Of	Type Mfg.	Net 10	Net 100
6-F-7264A	A	Black rubber	Screw	$1.27	$11.45
6-F-8038	B	Sponge rubber	cement	.31	.28
6-F-9653	C	Gray rubber	Snap-in	.61	.55

CUSTOMIZE YOUR OWN CABINET



BUD IMLOCK
BASIC CONSTRUCTION ELEMENTS FOR CABINETS & CONSOLES

Basic aluminum elements consist of corner connectors and extruded sections. By selecting the proper combination of each it is possible to assemble rigid, sturdy frames for every conceiveable type of cabinet, console, desk, etc. Extrusions are easily cut to length and are locked into position on the corners by self-tapping screws. A few typical assemblies using the most common corners and extrusions are listed below. For complete, detailed information request a Bud Imlock Catalog.

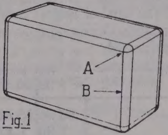
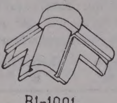
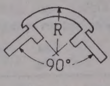


Fig. 1


B1-1001



B1-2004

Fig. 1 illustrates an all 90º assembly for small or medium size cabinets or boxes. Extrusions slotted for 1/16" panels. R=5/8".

Cat. No.	Used AT	Unit Description	Ea. 1-14	Ea. 15-24	Ea. 1-9	Ea. 10-14
6-BI-1001	A	Corner, 90º	$1.30	$1.15	......	.....
6-BI-2004	B	Extrusion, 12' long	.....	.....	$10.50	$9.45

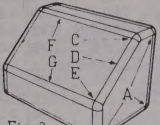
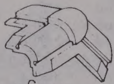
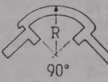


Fig. 2


Corner 90°+X°



B1-2024

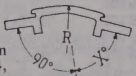
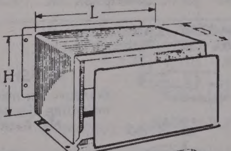
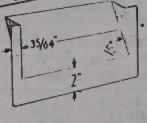


Fig. 2 with sloping panel at 22½º from vertical, uses heavier extrusion BI-2024, with one 5/8" flange for attaching front or rear panels and additional strength. Extrusions are 12 feet long. Xº is angle from vertical.

Cat. No.	Used At	Unit Description	Ea. 1-14	Ea. 15-24	Ea. 1-9	Ea. 10-14
6-BI-1001	A	Corner, 90º	$1.30	$1.15	......	......
6-BI-2024	D	Extrusion, 90º	.....	.....	$14.55	$13.10
6-BI-1012	E	Corner X=22½º	2.95	2.65	......	......
6-BI-1016	C	Corner X=67½º	2.95	2.65	......	......
6-BI-2021	F	Extrusion X=22½º	.....	.....	16.15	14.55
6-BI-2041	G	Extrusion X=67½º	.....	.....	15.55	14.00

FUTURA CABINETS





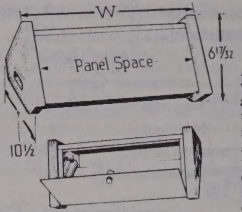
For housing small electronic equipment and devices. Modern rectangular design harmonizes with modular enclosures. Front panels are held in place by flanges on the body and require no panel mounting screws. Top and sides are one piece to which the bottom attaches by screws. Body and rear panel are 20 gauge steel. Front panel is 18 gauge steel. Base has 4 rubber feet. *For overall light gray finish add -HG suffix when ordering. For two-tone blue add -BBY suffix.

WITH VERTICAL PANEL

Cat. No.	Size H.	Size L.	Size D.	Lbs. Wt.	Use Chas.	Ea. 1-24	25-49	50-99
6-MD-1960*	7"	13"	8"	6¾	CB-40	$10.95	$9.85	$8.75
6-MD-1961*	8"	14"	9"	7¾	CB-997	11.75	10.60	9.40
6-MD-1962*	8"	16"	9"	8½	CB-998	12.20	11.00	9.75

WITH INCLINED PANEL

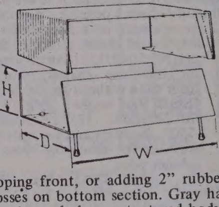
Cat. No.	Size H.	Size L.	Size D.	Lbs. Wt.	Use Chas.	Ea. 1-24	25-49	50-99
6-MD-1963*	7"	13"	8"	7	CB-40	12.85	11.55	10.30
6-MD-1964*	8"	14"	9"	8	CB-997	13.70	12.35	10.95
6-MD-1965*	8"	16"	9"	8¾	CB-998	14.70	13.25	11.75



MARK-T CABINETS

All-welded steel construction with removeable front panel, and hinged door. Truncated triangular design especially suited for use with controls. Angle of panel and door permit comfortable observation of dials, meters, switches, lights, etc. When door is opened entire contents are easily checked. Made of 16 gauge steel. Cam-action, self-adjusting spring latch on door is knob operated. Recessed, safety shielded carrying handles. 4 rubber feet furnished. Gray textured (GT) finish body. Light gray (GY) panel and door.

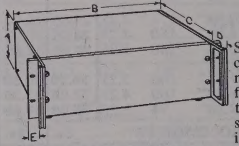
Cat. No.	W.	Panel or Door Area	Ea. 1-14	15-24	25-34
6-MT-214	16"	5½" x 14"	$35.13	$31.65	$28.10
6-MT-219	21"	5½" x 19"	38.50	34.65	30.80
6-MT-224	26"	5½" x 24"	45.35	40.80	36.30



TILT-A-VIEW CABINET

Two-piece, 18 -gauge steel construction. Lower section slides into channels and flanges formed in top. Hooded top shields sloping front from overhead glare. Variable viewing angle obtained by using vertical rear, or sloping front, or adding 2" rubber tipped legs which screw into bosses on bottom section. Gray hammertone body with matching panels or dark gray textured body with light gray panels (GGY).

Cat. No.	Size H.	Size W.	Size D.	Ea. 1-14	15-24	25-34
6-TV-2155	4½"	15"	10"	$10.25	$9.25	$8.20
6-TV-2156	6½"	16"	12"	12.00	10.80	9.60
6-TV-2157	8½"	17"	14"	17.45	15.70	13.95

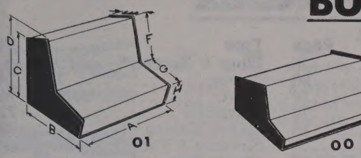


VALU/LINE

Styling that is both classic and contemporary together with innovative engineering and manufacturing techniques result in this ruggedly built enclosure. Despite its demonstrable superiority, the VALU/LINE Series is priced suprisingly lower than other products that are similar in appearance. This completely assembled unit includes two separate detachable rack mounting brackets and rubber feet . . . items which are normally considered extras. Adhesive paper protective covering of the 1/8" brushed aluminum panels provides an excellent surface for indicating position when drilling or punching panel areas. The VALU/LINE can be used as an independent enclosure, or in a standard E.I.A. 19" cabinet rack. Base, rear and top are .057 aluminum with smooth white enamel finish. The sides are 1/8" aluminum with white textured enamel. Bails and slides are available. Outer brackets are made from 11ga. steel, inner brackets are .090 aluminum. Assembled with 6-32 and 10-32 screws. Finsih in white texture with brush finish front panel. All handles are 2" deep (D).

Cat. No.	Cabinet Size A	B	C	E	Net Ea.
6-HC-14100	3.5"	12.75"	13"	5.25"	$49.20
6-HC-14101	3.5"	17"	13"	1"	51.85
6-HC-14102	5.25"	12.75"	13"	5.25"	50.80
6-HC-14103	5.25"	17"	13"	1"	53.40
6-HC-14104	7"	17"	13"	1"	56.10
6-HC-14105	8.75"	17"	13"	1"	58.80
6-HC-14106	10.5"	17"	13"	1"	61.50
6-HC-14107	10.5"	17"	15"	1"	64.15
6-HC-14108	12.25"	17"	15"	1"	66.80
6-HC-14109	14"	17"	15"	1"	72.15

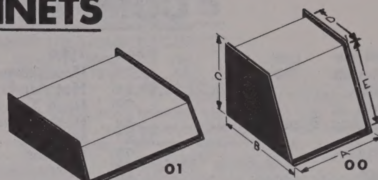
BUD CABINETS



COMPUCAB

As a standard product the Compucab series offers great value. Beats the high cost and delayed delivery problems of custom units. The new keyboard look matches today's advanced digital technology concepts. All aluminum construction combines beauty, utility and sturdiness. 1/8" body and sides are painted in black texture enamel and the one piece .057 aluminum panel area in smooth white enamel. Note that no fasteners are visible on panel area. Rubber feet are self-adhesive. O'all size: Fig. 00: (A) 10", (B) 8-15/64", (C) 4-9/32", (D) 5-11/32", (E) 4-15/64", (F) 2-19/32", (G) 4-3/32", (H) 1-7/8"; Fig. 01: (A) 14", (B) 10", (C) 8-51/64", (D) 9-61/64", (E) 4-9/16", (F) 6", (G) 5", (H) 3".

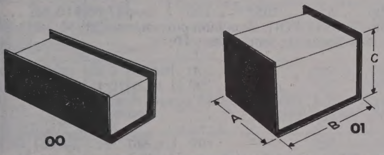
Cat.	Description	Net Ea.
6-SC-13100	Compucab	$16.60
6-SC-13101	Compucab	33.90



SLOPE

A modern concept in enclosures embodying clean vertical and horizontal lines in keeping with present decor. Highly desirable where quick access to the interior is desired. The frame is 1/8" aluminum with black texture finish while the body is .057" aluminum in smooth white enamel finish. The body, being one piece, is easily detached exposing the components in the interior. No fasteners are used which are exposed on the visible surfaces. Self-adhesive rubber feet are furnished. Provides excellent visibility of panel mounted components.

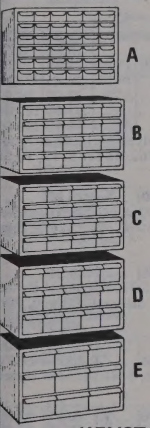
Cat. No.	O'All Size A	B	C	D	E	Net Ea.
6-SC-12100	5"	5"	4.25"	3.0781"	4.125"	$7.75
6-SC-12101	12"	10"	3.25"	8.4375"	3.0625"	16.20



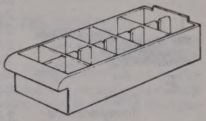
LINEAR

These highly practical enclosures offer solutions to the designer of electronic subsystems and instrumentation. Attractive and functional 1/8" aluminum used for the body and .057" aluminum for the panel area in a combination of black texture and smooth white enamel. The body is one piece, thus can be quickly removed exposing the entire interior. No visible fasteners are employed. Rubber feet are self-adhesive, unit is assembled with 6-32 screws.

Cat. No.	A	B	C	Net 1-24	25-34	35-49
6-RC-11100	10"	5"	3¼"	$11.50	$10.35	$9.20
6-RC-11101	10"	12"	8"	25.20	22.70	20.20

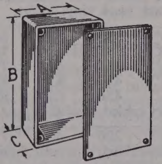


AKRO-MILS MODULAR CABINETS
FOR SMALL PARTS STORAGE



For individual use or in combination to create a miniature warehouse for small components. Cabinets can be stacked, hung on walls or placed on shelving. Cabinets are steel, have a common overall width of 17-7/8". Drawers are available in the heavy-duty type molded of high-impact gray plastic or of transparent plastic. Lock-tight dividers are dove-tailed to prevent drawers from spreading, move easily to other positions when the need arises.

HEAVY DUTY Cat. No.	TRANS-PARENT Cat. No.	Fig.	Drawers	O'ALL —DRAWER SIZE— W.	D.	H.	O'ALL —CABINET SIZE— W.	D.	H.	Lbs.	Net
....	239-17-136	A	36	2-3/4"	5-7/8"	1-7/16"	17-7/8"	6"	11-1/8"	13	$14.99
239-18-320	239-17-320	B	20	3"	11"	2"	17-7/8"	11"	10-1/4"	17	22.99
239-18-416	239-17-416	C	16	4"	11"	2"	17-7/8"	11"	10-1/4"	17	22.99
239-18-715	239-17-715	D	15	3-1/8"	11"	3-1/32"	17-7/8"	11"	10-5/8"	17	22.99
239-18-909	239-17-909	E	9	5-1/4"	11"	3-1/32"	17-7/8"	11"	10-5/8"	16	22.99

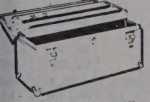


KEYSTONE PHENOLIC CASES

For general purpose use. Molded glossy black phenolic, per MIL-M-14, CFG, with .125" thick walls. Molded-in, recessed brass bosses are threaded 6-32 x .187" for panel mounting screws. *Tapped 4-40 no brass insert. Phenolic panels are .093" thick, mount recessed by means of screws in each corner.

Case Only Cat. No.	Net Each	Case Size A.	B.	C.	Panel Only Cat. No.	Net Each
116-703*	$0.48	2.875"	3.937"	1.437"	116-2042	$0.24
116-704*	.88	3.062"	5.875"	2.250"	116-2043	.39
116-700	.90	3.750"	6.250"	2.000"	116-2037	.33
116-701	1.42	5.250"	6.750"	2.312"	116-2038	.38
116-702	2.75	7.375"	8.375"	3.000"	116-2039	.65

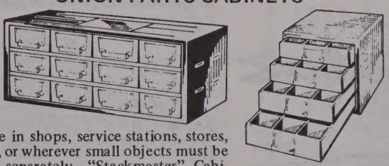
TOOL BOXES



Cantilever tray has 4 compartments. 300 lbs. lift test. Case finish thermosetting alkydamine coating in gray, tray in red. Made of first grade cold rolled steel with double-locked seams and fully returned edges.

Cat.	Size	Wt.	Net
Cat. 168-6316	16" x 7" x 7" high	Wt. 7 lbs.	Net $6.75
Cat. 168-6319	19" x 7" x 7" high	Wt. 8 lbs.	Net $7.42

UNION PARTS CABINETS



For use in shops, service stations, stores, homes, or wherever small objects must be stored separately. "Stackmaster" Cabinets have a solidly constructed steel frame with provision for interlocking when stacked. Transparent plastic drawers are 2¾" wide, 5½" long, and 1¼" deep. Removeable plastic partitions divide each drawer into three compartments. Each drawer is equipped with a pull handle, a card holder, and a safety stop which prevents complete accidental withdrawal of drawer. Case is charcoal gray.

Cat.	Drawers	W. x D. x H.	Wt.	Net Each
168-U-12	12	12" x 5¾" x 5¼"	4 lbs.	$3.15
168-U-24	24	12" x 5¾" x 11-1/8"	6 lbs.	5.62
168-U-36	36	12" x 5¾" x 16½"	8 lbs.	7.87
168-U-48	48	12" x 5¾" x 21¾"	10 lbs.	10.12

Model 410 (right) is heavier and has larger drawers than the "Stackmaster" models above. Cabinet is steel, with welded joints and one-piece drawer supports. Steel drawers are 9" wide, 11½" long, and 2" deep. Drawers are interchangeable, and each is equipped with a bar type pull and card holder. Each drawer is divided into 12 compartments by removeable partitions. Finish is charcoal gray.

Cat.	Drawers	W. x D. x H.	Wt.	Net Each
168-410	4	10" x 11½" x 10"	8-7/8 lbs.	$7.50

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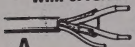
COMMUNICATIONS CABLES

With JACKET



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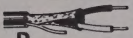

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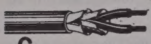

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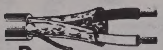

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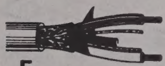

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High Temperature

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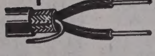

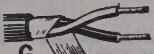

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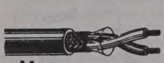

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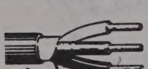

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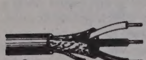

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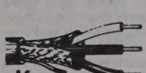


K

BELDFOIL®

A wide variety of gauges, insulations, shieldings and jackets for every Public Address, Inter-com and Call Sys tem application. Uniform quality and dimensions assure dependable service. Types 8739, 8737, 8759, 8790 an 8762 are recommended for stationary low impedance microphone lines. Capacity mfd/ft. *between conductor **between one conductor and other conductors tied to shield. Furnished only in packaged lengths as shown Specify length.

2 CONDUCTORS TWISTED—SHIELDED

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8640	A	2 #28 solid	.090"	100	55*	105**	100	....	$7.65	$15.30	....

GEOSOL® insulated (solderable, no stripping required), BELDFOIL aluminum-polyester shield, 30 AWG soli tinned Copperweld drain wire, white vinyl jacket. Max. operating temperature 105°C.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8450	B	2 #22 solid	.118"	200	40*	76**	100	$4.95	8.95	17.85	35.7
2-8451	B	2 #22 (7x30)	.135"	200	34*	67**	100	5.25	10.45	20.85	41.7

Tinned copper, polypropylene insulated, conductors cabled, stranded tinned copper drain wire, BELDFOI aluminum-polyester shield, paper wrap, black or gray vinyl jacket.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-9452	C	2 #24 (19x36)	.135"	200	30*	58**	100	5.40	....	22.35	44.7

Tinned copper, polypropylene insulated, conductors cabled, noise reducing tape, 24 AWG stranded tinned copper drain wire, BELDFOIL aluminum-polyester shield, black vinyl jacket.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8641	D	2 #24 (7x32)	.160"	350	22*	42**	100	$4.55	....	18.35	36.7
2-8761	D	2 #22 (7x30)	.167"	350	24*	47**	100	....	....	18.75	37.5
2-8762	D	2 #20 (7x23)	.196"	350	27*	49**	100	5.80	11.85	23.65	47.2
2-8760	D	2 #18 (16x30)	.222"	450	24*	44**	100	....	14.25	28.45	56.8
2-8719	D	2 #16 (19x29)	.274"	600	24*	47**	100	....	....	42.00	84.0
2-8720	D	2 #14 (19x27)	.340"	750	24*	47**	100	....	....	63.95	127.9
2-8718	D	2 #12 (19x25)	.400"	1000	25*	49**	100	....	....	96.15	192.3

Tinned copper, polyethylene insulated, conductors cabled, BELDFOIL aluminum-polyester shield, strande tinned copper drain wire, (24 AWG for 8641, 22 for 8761, and 20 for 8760 and 8762, 18 for 8719, 16 fo 8720, 14 for 8718), chrome vinyl jacket.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-83394	E	2 #22 (7x30)	.204"	1000	22*	42**	100	31.50	....	315.00	....

Tinned copper, insulated with FEP teflon, conductors cabled, noise reducing tape, 22 AWG (7x30), nicke coated-copper drain wire, special BELDFOIL shield, red Silicone rubber jacket. +150°C max., -70°C minimum operating temperature. Jacket working voltage 1000 v-dc shield to ground.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-83393	E	2 #20 (7x28)	.245"	1000	22*	42**	100	45.45	...	439.50	....

Tinned copper, insulated with FEP Teflon, conductors cabled, noise reducing tape, 20 AWG nickel coate copper drain wire, special BELDFOIL shield, yellow Silicone rubber jacket. +150°C max., -70°C min. op temp.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8437	F	2 #22 solid	.200"	200	48*	85**	88	....	...	30.00	60.0
2-8441	F	2 #22 (16x34)	.210"	200	49*	86**	88	7.45	...	32.85	65.7

Tinned copper, vinyl insulated, conductors cabled, 8437 solid tinned copper drain wire, 8441 stranded tinne copper drain wire, tinned copper braid shield, black vinyl jacket.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8739	G	2 #22 solid	.160"	350	38*	66**	94	4.88	....	20.80	41.5
2-8737	G	2 #22 (7x30)	.170"	350	40*	70**	89.3	5.20	11.40	22.75	45.4
2-8759	G	2 #20 (7x28)	.195"	350	47*	79**	81.0	6.55	....	26.80	53.5
2-8790	G	2 #18 (7x26)	.231"	450	53*	92**	76.5	8.25	17.70	35.35	70.6
2-8780	G	2 #16 (19x29)	.266"	450	57*	98**	84.1	10.45	....	45.75	91.5

Tinned copper, vinyl insulated, conductors cabled, tinned copper spiral wrapped shield, chrome vinyl jacke

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8208	H	2 #18 (16x30)	.255"	200	46*	77**	69	10.60	...	46.95	93.9

Tinned copper, rubber insulated, conductors cabled, separator, braided tinned copper shield, chrome vinyl jacket.

INSTRUMENTATION CABLES
3-CONDUCTOR SHIELDED

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8731	I	3 #22 solid	.178"	350	36*	63**	76.2	....	....	24.30	48.6
2-8791	I	3 #18 (7x26)	.236"	450	47*	84**	78.2	10.15	....	44.70	89.4

Tinned copper, vinyl insulated conductors cabled, tinned copper spiral wrapped shield, chrome vinyl jacke

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-9770	J	3 #22 (7x30)	.145"	200	32*	60**	100	....	13.30	26.55	53.1

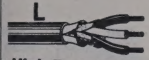
Tinned copper, polypropylene insulated, conductors cabled, BELDFOIL aluminum-polyester shield, 22 AW stranded tinned copper ground drain wire, brown vinyl jacket.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V.	Nom. Capacity (Pf/Ft.)		% Shield	Net 100'	Net 250'	Net 500'	N 100
2-8771	K	3 #22 (7x30)	.175"	350	23*	41**	100	....	11.85	23.65	47.2
2-8772	K	3 #20 (7x28)	.200"	350	27*	51**	100	....	....	29.85	59.7
2-8770	K	3 #18 (16x30)	.236"	450	24*	48**	100	....	....	38.05	76.0
2-8618	K	3 #16 (19x29)	.300"	600	26*	50**	100	....	....	57.85	115.7

Tinned copper, polyethylene insulated, conductors cabled, BELDFOIL aluminum-polyester shield, strande tinned copper ground drain wire, (22AWG for 9770 & 8771, 20 AWG for 8770 & 8772, 18 AWG for 8618 chrome vinyl jacket.

BELDEN WIRE PRODUCTS

3-CONDUCTOR SHIELDED CABLES CONT'D.



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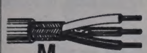
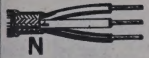
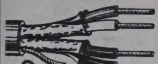




Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Capacity (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-83395	L	3 #22 (7x30)	.213"	1000	20*	35**	....	....	...	$39.30	.....	$282.50	.....
Tinned copper, insulated with FEP Teflon, conductors cabled, noise reducing tape, 22 AWG (97x30) nickel coated copper drain wire, special BELDFOIL (100%) shield, red silicone rubber jacket. +150°C maximum -70°C minimum operating temperature. Jacket working voltage 1000 v-dc shield to ground.													
2-8643	M	3 #30 (7x38)	.086"	200	25*	43**	....	$2.67	$4.50	8.55	$20.05	......	.....
Tinned copper, polypropylene insulated, conductors cabled around textile strength member, tinned copper braid shield, chrome vinyl jacket. 95% shield coverage.													
2-8735	N	3 #22 (7x30)	.199"	350	34*	60*	$1.61	....	4.20	7.30	.....	$30.85	$61.65
Tinned copper, vinyl insulated, conductors cabled, tinned copper braid shield, chrome vinyl jacket. 70% shielding.													

INSTRUMENTATION, COMMUNICATION & STRAIN GAUGE CABLES

4-CONDUCTOR SHIELDED



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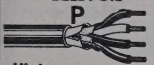

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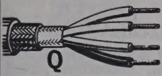

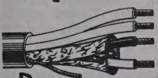

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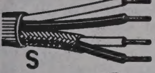
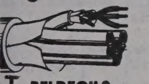


Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Capacity (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-8723	O	4 #22 (7x30)	.165"	400	35*	62**	....	....	....	7.45	....	32.60	65.20
Tinned copper, polypropylene insulated, black-red and green-white conductors paired under separate BELDFOIL aluminum-polyester shields, stranded tinned copper common drain wire, chrome vinyl jacket. 100% shielding.													
2-83396	P	4 #22 (7x30)	.222"	1000	20*	35**	....	11.85	....	45.75	....	422.50	....
Tinned copper, insulation FEP Teflon, conductors cabled, noise reducing tape, 22 AWG (7x30) nickel coated copper drain wire, special BELDFOIL shield, red silicone rubber jacket, +150°C maximum, -70°C minimum operating temperature. Jacket working voltage 1000 v-dc shield to ground. 100% shielding.													
2-8404	Q	4 #20 (26x34)	.255"	600	25*	45**	3.03	....	....	14.70	33.40	66.70	133.35
Tinned copper, polyethylene insulated, conductors cabled, rayon braid, tinned copper braid, chrome vinyl jacket.													
2-8407	Q	4 #16 (65x34)	.422"	600	37*	65**	....	....	....	32.65	80.40	....	....
Tinned copper, separator, rubber insulated, conductors cabled, rayon braid, tinned copper braid shield, cotton wrap, black neoprene jacket. 84% shielding.													
2-8724	R	2 #22 (7x30) 2 #22 (7x30)	.165"	200	34*	67**	....	....	....	....	16.00	31.90	63.75
2 shielded and 2 unshielded. Tinned copper, polypropylene insulation, BELDFOIL aluminum-polyester shield over 2 conductors, 24 AWG stranded tinned copper drain wire, chrome vinyl jacket. 100% shielding.													
2-8732	S	2 #22 (7x30) 2 #22 (7x30)	.188" x .296"	350	21*	37**	....	....	....	8.40	....	39.90	79.75
2 shielded and 2 unshielded. Tinned copper, polyethylene insulated, tinned copper braid shield over 1 pair. No drain wire. Chrome vinyl jacket. 62% shielding.													

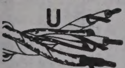
MULTIPLE TRIPLETS AUDIO & COMMUNICATIONS CABLES



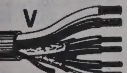
BELDFOIL®

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Capacity (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-9771	T	21 #22 (7x30)	.550"	300	32*	60**	....	....	....	....	....	227.25	426.00
2-9772	T	36 #22 (7x30)	.740"	300	32*	60**	....	....	....	....	....	385.50	720.00
9771 is 7 tripletts, 9772 is 12 tripletts. Tinned copper, polypropylene insulation, conductors cabled in triplets each shielded with BELDFOIL aluminum-polyester shield, 22 AWG stranded tinned copper drain wire, with .020" white vinyl jacket, individual triplet jackets identified by color coded stripes. Overall chrome vinyl jacket.													

MULTIPLE AUDIO QUADS & COMMUNICATIONS CABLES

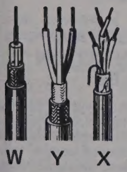


BELDFOIL®



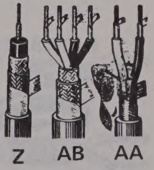
BELDFOIL®

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Capacity (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-8733	U	3 #22 (7x30)	.205"	350	—	51**	....	....	....	7.95	....	31.65	62.30
Tinned copper, polyethylene insulation, each conductor separately BELDFOIL aluminum-polyester shielded, ground wire for each conductor is tinned cadmium bronze ribbon under BELDFOIL, conductors cabled, chrome vinyl jacket.													
2-8786	V	2 #22 (7x30) 4 #24 (7x32)	.256"	350	—	—	....	....	....	9.30	....	42.60	.....
Tinned copper, vinyl insulated, conductors cabled, 4 conductors cabled under BELDFOIL aluminum-polyester shield, 2 conductors unshielded, 22 AWG drain wire, chrome vinyl jacket.													



MICROPHONE CABLES

Microphone cables are designed for flexible service at audio frequencies. They are used not only for all types of microphones, but also for home entertainment and high fidelity systems, musical instruments, tape recorders and shielded power supplies. Shielded single conductor cables are used for high impedance, while multiple conductors are used for low impedance applications. All cables are precision engineered and manufactured to transmit clear signals and to cancel out hum pickup and crosstalk interference. They are designed to withstand the flexing and normal abuse of studio, laboratory and home usage.



SHIELDED VINYL MIKE & POWER CABLES

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Ohms Imp.	Shld. %	Nom. Cap. (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-8411	W	1 #25 (7x33)	.144"	3500	52	72	—	37**	$1.26	$1.80	$2.85	$5.40	$11.10	$22.20	$44.40
2-8401	W	1 #25 (7x33)	.200"	5000	57	74	—	25**	1.53	2.09	3.68	6.75	14.20	28.30	56.55
3 strands copper, 4 strands Copperweld tinned, cellulose yarn braid, rubber insulated, rayon braid, tinned copper braid shield, cellulose yarn wrap, black rubber jacket overall.															
2-8420	X	2 #24 (45x40)	.185"	500	—	77	22*	40**	2.19	3.25	5.05	9.45	21.90	43.80	.....
Tinned cadmium bronze, cotton wrap, polyethylene insulation, cabled with fillers, rayon braid, tinned copper shield. chrome vinyl jacket.															
2-8422	Y	2 #22 (16x34)	.231"	1000	—	87	18*	32**	1.94	2.96	5.65	9.70	21.15	42.25	84.45
2-8403	Y	3 #20 (26x34)	.244"	600	—	89	25*	45**	....	....	....	15.60	37.50	75.00	.....
2-8404	Y	4 #20 (26x34)	.255"	600	—	87	23*	40**	3.03	....	....	14.70	33.40	66.70	133.35
2-8405	Y	5 #20 (26x34)	.275"	600	—	83	23*	40**	....	....	....	.....	39.10	78.10	156.15

*Between conductors. **Between 1 conductor and remaining conductors ties to shield.

Continued On Next Page.

BELDEN WIRE PRODUCTS

RUBBER, HYPALON & NEOPRENE MIKE & POWER CABLES

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Ohms Imp.	Shld. %	Nom. Cap. (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-8410	Z	1 #25 (7x33)	.190"	3000	52	80	—	33**	....	$3.98	$7.00	$12.90	$29.95	$59.85	......

3 strands copper, 4 strands Copperweld tinned, cellulose yarn braid, rubber insulated, rayon braid, tinned copper braid shield, cellulose yarn warp, black rubber jacket.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Ohms Imp.	Shld. %	Nom. Cap. (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-8413	AA	2 #24 (45x40)	.190"	300	--	100	38*	71**	$2.69	4.05	7.50	13.90	33.25	66.45	......
2-8406	AA	3 #24 (45x40)	.223"	300	--	100	43*	76**	....	....	....	17.70	39.00	84.75	......

Tinned cadmium bronze, cotton serve, rubber insulated, cabled with fillers, 100% coverage conductive textile wrap shield, tinned copper braid shield, cotton serve, black rubber jacket.

Cat. No.	See Fig.	AWG & Stranding	O'All Dia.	Wrkg. V-DC	Ohms Imp.	Shld. %	Nom. Cap. (Pf/Ft.)		Net 15'	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-8412†	AB	2 #20 (26x34)	.268"	600	--	84	42*	68**	....	4.20	7.60	14.55	33.30	66.45	$132.90
2-8402†	AB	2 #20 (26x34)	.268"	600	—	84	42*	68**	....	....	....	15.60	37.50	75.00	......
2-8428‡	AB	2 #18 (41x34)	.295"	600	—	91	47*	80**	....	....	....	19.00	.....	88.15	176.25
2-8408†	AB	2 #16 (65x34)	.385"	600	—	84	32*	56**	....	....	....	27.10	60.00	131.10	......
2-8423‡	AB	3 #20 (26x34)	.277"	600	—	84	50*	85**	3.00	....	8.95	16.35	38.50	76.95	153.90
2-8424‡	AB	4 #20 (26x34)	.295"	600	—	83.5	55*	95**	3.39	....	9.75	18.15	43.00	85.90	171.75
2-8407‡	AB	4 #16 (65x34)	.422"	600	—	84	37*	65**	....	....	....	32.65	80.40	.....	......
2-8425	AB	5 #20 (26x34)	.323"	600	—	76	44*	80**	....	....	....	22.60	55.35	.....	......
2-8426	AB	6 #20 (26x34)	.349"	600	—	90	40*	78**	....	....	....	27.90	68.30	.....	......
2-8427	AB	7 #20 (26x34)	.360"	600	—	90	40*	75**	....	....	....	30.40	74.25	.....	......
2-8418	AB	8 #20 (26x34)	.386"	600	—	92	42*	75**	....	....	....	34.35	83.40	.....	......

*Capacity between conductors. **Between 1 conductor and other conductors tied to shield. †Brwon Hypalon jacket. ‡Black neoprene jacket.

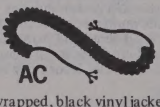
RETRACTILE (COILED) MICROPHONE CABLES

Keep microphone and telephone cords from tangling and cluttering up desk tops, communications consoles and the front seat of motor vehicles. †Unshielded, tinned copper, nylon ins. ‡Unshielded, 5 str. TCW, 16 str. TC, rubber ins., paper tape. *Shielded, tinned cadmium bronze, rubber ins., spiral TC shield, cotton wrap. §Shielded, tinned copper, polypropylene ins., spiral TC shield. § §Shielded, 5 str. TCW, 16 str. TC, rubber ins., double BELDFOIL aluminum-polyester shield with drain wire same as conductors, paper tape. **Individually shielded.,5 str. TCW, 16 str. TC rubber ins., double BELDFOIL aluminum-polyester shield, paper tape. Type 8605 has gray PVC jacket, all others neoprene jacket.

Cat. No.	AWG & Shielding	Length Retr.	Length Extd.	Net Ea.	Net 15	Net 50
2-8409	4 #28 (7x36)†	.12"	6'	$1.52	.....	.....
2-8415	4 #23 (21x36)‡	11.5"	6'	1.77	.....	$79.50
2-9415	4 #23 (21x36)‡	30"	15'	3.75	$49.50	.....
2-8499	1 #24 (45x40)*	7.5"	4'	1.29	.....	.....
2-8605	1 #24 (19x36)§	21.5"	12'	1.94	.....	.....
2-8497	1 #23 (21x36)§ § 2 #23 (21x36)‡	11.5"	6'	1.94	.....	81.00
2-9417	1 #23 (21x36)§ § 2 #23 (21x36)‡	30"	15'	4.00	40.15	.....
2-8491	2 #23 (21x36)** 2 #23 (21x36)‡	12"	6'	2.24	.....	.....
2-9416	2 #23 (21x36)** 2 #23 (21x36)‡	30"	15'	5.25	.....	.....
2-8490	4 #23 (21x36)‡	11.5"	6'	1.94	.....	.....

RETRACTILE TELEPHONE CORDS

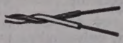
AD


AC

*Bare cadmium bronze, vinyl ins., paper wrapped, black vinyl jacket, one end stripped 2.75", spade terminals attached and hook strain relief clamped over jacket. Other end stripped 3.437" and spade terminals attached. †Tinsel conductors, vinyl ins., vinyl jacket. One end stripped 7", spade terminals attached and hook strain relief clamped over jacket. Other end has red and black conductors pulled out of jacket and cut to 3" length, spade terminals attached, molded plastic strain relief, 6.75" jacket remains on 2 white conductors, spade terminals attached.

Cat. No.	See Fig.	AWG & Stranding	Nom. O.D.	Length Retr.	Length Extd.	Net Ea.	Net 15
2-8495	AC	23 (21x36)*	.220"	10"	4.5'	$1.79	.....
2-9443	AD	31 (tinsel)†	.195"	10.5"	5'	2.70	$45.25
2-9440	AD	31 (tinsel)†	.195"	22"	10'	3.38	43.50
2-9441	AD	31 (tinsel)†	.195"	33"	15'	4.35	47.00
2-9442	AD	31 (tinsel)†	.195"	48"	25'	5.25	70.20

PHONO, HI-FI & STEREO CABLES

AE


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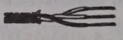

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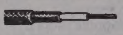

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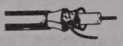

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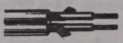


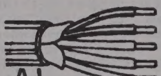
*For phono pickup arms. Tinned copper, vinyl insulation, conductors cabled. †For shielded inputs. Tinned copper braid shield. ‡Miniature audio connecting cable. Tinned copper, rubber insulated, tinned copper braid shield, brown cotton cover. §Miniature audio connecting cable. 3 strands tinned copper and 4 strands Copperweld, cellular polyethylene insulated, double BELDFOIL aluminum polyester shield, inner shield folded, 26 AWG stranded tinned copper ground drain wire, chrome vinyl jacket. **Language lab cable. 3 strands tinned copper and 4 strands of Copperweld, polyethylene insulation, individual tinned copper spiral wrapped shields, gray vinyl jacket. ††.106" x 213". ‡‡Each chan.

Cat. No.	See Fig.	AWG & Stranding	Nom. O.D.	Pf/ Ft.	Net 10'	Net 25'	Net 100'	Net 250'
2-8430	AE	2 #32 (7x40)*	.050"	21	$0.81	$1.14	....	$6.60
2-9435	AE	3 #32 (7x40)*	.058"	22	1.20	1.71	$4.05	....
2-9436	AE	4 #32 (7x40)*	.065"	22	1.47	2.10	4.90	....
2-8429	AF	2 #32 (7x40)†	.057"	30	1.14	1.89	....	12.75
2-8419	AF	3 #32 (7x40)†	.067"	30	1.26	2.22	....	15.75
2-9437	AF	4 #32 (7x40)†	.072"	30	1.58	2.55	7.65	....
2-8431	AG	1 #25 (16x36)‡	.095"	96	1.08	1.79	5.70	....
2-8417	AH	1 #25 (7x33)§	.140"	25	....	1.77	5.10	11.10

LANGUAGE LAB CABLE

Cat. No.	See Fig.	AWG & Stranding	Nom. O.D.	Pf/ Ft.	Net 10'	Net 25'	Net 100'	Net 250'
2-8416	AI	2 #25 (7x33)**	††	35‡‡	....	2.31	7.60	17.25

SPECIAL DATA & INSTRUMENTATION CABLES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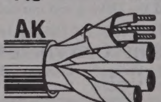
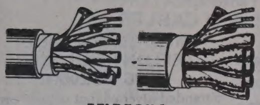

AK

†Tinned copper, foam polypropylene insulated, conductors cabled, each pair individually BELDFOIL shielded with 24 AWG drain wire. ‡Tinned copper conductors, polypropylene insulated, each pair with 22 AWG drain wire. Each pair individually BELDFOIL shielded with polyester tape wrap. *GEOSOL insulated (solderable without stripping), conductors cabled, 3-conductor group shielded from 2-conductor group, overall BELDFOIL aluminum-polyester shield. Max. opr. temp. 105°C. All with vinyl jacket.

Cat. No.	See Fig.	AWG & Stranding	Nom. O.D.	Wrkg. V.	Shld. %	Net 500'	Net 1000'
2-9784	AK	12 #24 (7x32) 6 pairs†	.494"	60	100	$134.25	$268.50
2-8725	AK	8 #20 (7x28) 4 pairs‡	.360"	400	100	134.40	268.80
						Net 25'	Net 50'
2-9640	AJ	3 #28 solid*	.087"	100	100	$2.40	$4.05

BELDEN WIRE PRODUCTS

MULTIPLE-PAIR INDIVIDUALLY-SHIELDED CABLES



BELDFOIL®

Solid conductors tinned copper with vinyl insulation, cabled in pairs, each pair and its ground wire under BELDFOIL aluminum-polyester shield. Stranded conductors tinned copper with polypropylene insulation, each pair and its stranded tinned copper drain wire under BELDFOIL aluminum polyester shield. All cables have chrome vinyl jacket overall.

Cat. No.	No. Prs.	AWG & Stranding	Nom. O.D.	Wrkg. V.	Cap. (Pf/Ft.)		Net 100′	Net 250′	Net 500′	Net 1000′
2-8767	3	#22 solid	.279"	300	40*	77**	$12.25	$26.10	$55.75	$111.45
2-8768	6	#22 solid	.394"	300	40*	77**	25.00	54.55	116.40	232.80
2-8777	3	#22 (7x30)	.265"	300	30*	55**	13.80	32.40	64.80	129.60
2-8778	6	#22 (7x30)	.394"	300	30*	55**	28.15	68.30	136.55	272.10
2-8774	9	#22 (7x30)	.440"	300	30*	55**	45.40	99.75	199.50	399.00
2-8775	11	#22 (7x30)	.485"	300	30*	55**	49.50	118.30	236.55	473.10
2-8776	15	#22 (7x30)	.540"	300	30*	55**	64.95	156.85	313.65	627.30
2-8769	19	#22 (7x30)	.620"	300	30*	55**	88.20	209.10	418.15	836.25
2-9773	3	#18 (16x30)	.372"	400	30*	55**	.....	.....	100.15	200.25
2-9774	6	#18 (16x30)	.555"	400	30*	55**	.....	.....	204.75	409.50
2-9775	9	#18 (16x30)	.620"	400	30*	55**	.....	.....	309.00	618.00
2-9776	12	#18 (16x30)	.765"	400	30*	55**	.....	.....	411.00	822.00
2-9777	15	#18 (16x30)	.830"	400	30*	55**	.....	.....	513.00	1026.00

*Capacity between conductors. **Between 1 conductor and other conductors tied to shield.

MULTIPLE-PAIR UNSHIELDED
SOUND & CONTROL CABLES

Typical application balanced line sound systems. Made with 80°C vinyl plastic compounds for high dielectric strength and best physical properties such as free stripping, small diameter and tear resistance. Resists effects of water, sun, oil, grease and ozone. Conductors paired in short-lay twist for balance, providing a quiet circuit free of cross talk.

Cat. No.	No. Prs.	AWG & Stranding	O'All Dia.	Wrkg. V.	Net 100′	Net 500′	Net 1000′
2-8740	1	#22 solid	.150"	200	$3.02	$10.80	$21.60
2-9740	1	#18 (16x30)	.220"	400	....	22.35	44.70
2-8741	2	#22 solid	.201"	200	4.95	20.10	40.20
2-9744	2	#22 (7x30)	.230"	200	....	23.65	47.25
2-8742	3	#22 solid	.240"	200	6.55	28.05	56.10
2-9745	3	#22 (7x30)	.280"	200	....	35.10	70.20
2-8690	3	#18 (16x30)	.362"	400	15.00	67.45	134.90
2-8757	4	#22 solid	.255"	200	....	37.20	74.40
2-9746	4	#22 (7x30)	.295"	200	....	45.95	89.85
2-8743	6	#22 solid	.305"	200	10.80	49.45	98.85
2-8747	6	#22 (7x30)	.340"	200	13.05	59.70	119.40
2-8691	6	#18 (16x30)	.550"	400	30.90	141.10	282.20
2-8748	9	#22 (7x30)	.389"	200	19.60	92.65	185.25
2-9747	12	#22 (7x30)	.440"	200	.....	127.50	255.00
2-9741	12	#18 (16x30)	.690"	400	.....	273.00	546.00
2-8754	13	#22 solid	.409"	200	22.50	107.80	215.55
2-8749	15	#22 (7x30)	.455"	200	32.85	155.80	311.55
2-9742	15	#18 (16x30)	.800"	400	.....	341.25	682.50
2-9748	19	#22 (7x30)	.520"	200	.....	196.15	392.15
2-9743	19	#18 (16x30)	.880"	400	.....	430.50	861.50
2-9749	23	#22 (7x30)	.570"	200	.....	252.00	504.00

MULTIPLE CONDUCTOR UN-PAIRED
UNSHIELDED AUDIO & CONTROL CABLES

Tinned copper conductors, vinyl insulation, conductors cabled, chrome vinyl jacket overall. #22 (7x30) gauge rated 200 v-wrkg., #18 (16x30) gauge rated 400 v-wrkg.

Cat. No.	No. Cond.	AWG & Stranding	O'All Dia.	Net 25′	Net 100′	Net 500′	Net 1000′
2-8443	3	#22 (7x30)	.150"	$1.47	$3.90	$15.70	$31.35
2-8444	4	#22 (7x30)	.168"	1.68	5.10	21.30	42.60
2-8445	5	#22 (7x30)	.180"	2.03	6.00	25.50	51.00
2-9430	7	#22 (7x30)	.200"	....	....	32.25	64.50
2-8456	10	#22 (7x30)	.260"	....	11.65	52.80	105.60
2-8457	12	#22 (7x30)	.260"	....	13.05	60.05	120.05
2-8458	15	#22 (7x30)	.320"	....	21.70	97.50	195.00
2-9431	20	#22 (7x30)	.345"	....	....	119.70	239.40
2-8459	25	#22 (7x30)	.370"	....	34.05	156.30	312.60
2-9432	30	#22 (7x30)	.400"	....	....	171.75	343.50
2-9433	40	#22 (7x30)	.455"	....	....	227.25	454.50
2-9434	50	#22 (7x30)	.500"	....	....	283.50	567.00
2-8446	4 2	#22 (7x30) #18 (16x30)	.222"	....	8.85	39.10	78.15
2-8447	5 2	#22 (7x30) #18 (16x30)	.246"	....	10.60	45.60	91.20
2-8448	6 2	#22 (7x30) #18 (16x30)	.250"	....	11.20	49.65	99.30
2-8449	7 2	#22 (7x30) #18 (16x30)	.261"	....	11.85	53.65	107.25
2-8489	4	#18 (16x30)	.250"	....	9.55	41.80	83.60

Continued In Next Column.

MULTIPLE CONDUCTOR UN-PAIRED CONT'D.

Cat. No.	No. Cond.	AWG & Stranding	O'All Dia.	Net 25′	Net 100′	Net 500′	Net 1000′
2-8465	5	#18 (16x30)	.286"	....	$11.65	$53.35	$106.65
2-8467	7	#18 (16x30)	.324"	....	15.40	70.30	140.55
2-8469	9	#18 (16x30)	.379"	....	20.95	97.75	195.45
2-8466	12	#18 (16x30)	.412"	....	28.20	136.80	273.60
2-8468	15	#18 (16x30)	.490"	....	39.00	184.05	368.10
2-8619	19	#18 (16x30)	.505"	....	.....	209.85	419.70
2-9626	25	#18 (16x30)	.600"	....	.....	280.50	561.00

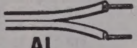
MULTIPLE CONDUCTORS UN-PAIRED 600 V-WRKG.

Cat. No.	No. Cond.	AWG & Stranding	O'All Dia.	Net 25′	Net 100′	Net 500′	Net 1000′
2-8620	4	#16 (19x29)	.375"	....	14.65	69.00	138.00
2-9620	5	#16 (19x29)	.405"	....	19.50	81.45	162.90
2-8621	7	#16 (19x29)	.455"	....	27.15	121.65	243.30
2-9621	9	#16 (19x29)	.510"	....	.....	151.20	302.40
2-8622	12	#16 (19x29)	.600"	....	44.35	205.05	410.10
2-8623	15	#16 (19x29)	.650"	....	62.10	294.45	588.90
2-8624	19	#16 (19x29)	.715"	....	76.20	357.75	715.50
2-9622	25	#16 (19x29)	.820"	....	.....	411.00	822.00
2-8627	4	#14 (19x27)	.495"	....	26.40	120.85	241.70
2-9623	5	#14 (19x27)	.560"	....	32.75	144.00	288.00
2-8628	7	#14 (19x27)	.630"	....	44.70	207.20	414.40
2-9624	9	#14 (19x27)	.750"	....	.....	225.75	451.50
2-8629	12	#14 (19x27)	.770"	....	75.15	362.85	725.70
2-9625	15	#14 (19x27)	.900"	....	.....	382.50	765.00

TYPE SO NEOPRENE UN-PAIRED

Bare copper, rubber insulated, conductors cabled with fillers, black neoprene jacket. 600 v-wrkg. UL listed.

Cat. No.	No. Cond.	AWG & Stranding	O'All Dia.	Net 25′	Net 100′	Net 500′	Net 1000′
2-9420	5	#16 (65x34)	.520"	....	....	262.50	525.00
2-9422	7	#16 (65x34)	.560"	....	....	206.25	412.50
2-9424	9	#16 (65x34)	.645"	....	....	262.50	525.00
2-9425	12	#16 (65x34)	.745"	....	....	358.50	717.00
2-9427	16	#16 (65x34)	.800"	....	....	450.75	901.50
2-9429	20	#16 (65x34)	.880"	....	....	561.00	1047.00



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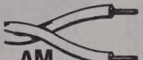
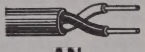


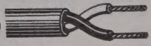
AM



AN

TWO CONDUCTOR
UNSHIELDED CABLES

AO



For general use in electronic and electrical equipment. Copper conductors with vinyl insulation. Figs. AN and AO have overall chrome vinyl jacket.

Cat. No.	See Fig.	AWG & Stranding	Nom. O.D.	Wrkg. V.	Net 100′	Net 500′	Net 1000′
2-8781	AL	#22 solid	.060x.120	100	$2.25	$6.70	$13.35
2-8782	AL	#24 (7x32)	.058x.115	300	2.03	6.75	13.50
2-8649	AL	#20 (7x28)	.073x.115	300	3.14	11.25	22.50
2-8482	AM	#19 solid	.130"	350	3.23	11.85	23.70
2-8460	AM	#18(7x26)	.175"	450	4.65	18.25	36.45
2-8470	AM	#16 (19x29)	.195"	600	....	23.10	46.20
2-8740	AN	#22 solid	.150"	200	3.02	10.80	21.60
2-8442	AO	#22 (7x30)	.165"	350	....	12.75	25.50
2-8205	AO	#20 (10x30)	.190"	350	4.05	15.00	30.00
2-8486	AN	#19 solid	.162"	350	....	14.50	29.00

Continued On Next Page.

BELDEN WIRE PRODUCTS

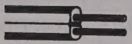
TWO CONDUCTOR
UNSHIELDED CABLES CONT'D.

Cat. No.	See Fig.	AWG & Stranding	Nom. O.D.	Wrkg. V.	Net 100'	Net 500'	Net 1000'
2-8461	AO	#18 (7x26)	.226"	450	$5.50	$22.35	$44.70
2-9740	AO	#18 (16x30)	.220"	400	....	22.35	44.70
2-8471	AO	#16 (19x29)	.256"	600	....	30.30	60.60
2-8473	AO	#14 (19x27)	.332"	600	....	48.15	96.30

THREE CONDUCTOR
UNSHIELDED CABLES

Cat. No.	See Fig.	AWG & Stranding	Nom. O.D.	Wrkg. V.	Net 100'	Net 500'	Net 1000'
2-8476	AL	#16 (19x29)	.102x.293	300	$9.75	$44.25	.....
2-8443	AM	#22 (7x30)	.150"	200	3.90	15.70	$31.35
2-8487	AN	#19 solid	.180"	350	....	20.85	41.70

PORTABLE CORDAGE
PARALLEL LAMP CORD



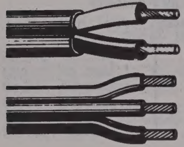
For light duty appliances, radios, lamps, extensions, etc. Also used for speaker lines in hi-fi and sound installations. 8462 has stranded tinned copper conductors with brown or ivory insulation. 8888 has bare copper conductors with brown, ivory or gray vinyl insulation. Both are UL listed. Specify color when ordering.

Cat. No.	AWG & Stranding	Overall Size	Net 25'	Net 100'	Net 250'
2-8462	2 #18 (41x34)	.123" x .223"	$1.59	$4.74	$11.40
2-8888	2 #18 (41x34)	.110" x .207"	1.56	4.28	9.30

POWER CORDAGE

For portable power tools, motors and other uses requiring a sturdy power cord which is resistant to rough handling. Stranded copper conductors (* 41 x34, † 65x34, ‡ 26x34, § 41x30), rubber insulation. Cabled with fillers. Overall black rubber jacket. Types 8452, 8472 and 8453 are UL listed.

Cat. No.	AWG & Stranding	Net 25'	Net 50'	Net 100'	Net 250'	Net 500'	Net 1000'
2-8452	2#18*	$2.46	$4.50	$7.95	$17.80	$35.55	$71.10
2-8472	2#16†	3.18	....	12.10	28.45	.....	.....
2-8453	3#18*	....	5.65	10.90	.....	51.55	.....
2-8479	3#14§	....	....	17.85	43.65	.....	.....
2-8454	4#18*	....	6.45	12.25	.....	56.40	112.80
2-8455	3#20‡ 2#18*	....	12.15	.....	30.60	.....	.....



PRIMARY WIRE

Two conductor types have parallel tinned copper conductors, vinyl insulation, and an overall chrome vinyl jacket. Three and four conductor types have parallel bare stranded copper conductors with vinyl insulation. *Conforms to SAE and Outboard Industries Association color coding for boat trailers.

Cat. No.	AWG & Stranding	Overall Size	Net 100'	Net 500'
2-8677	2#16 (19x29)	.164" x .276"	$7.45	$35.35
2-8675	2#14 (19x27)	.189" x .326"	9.40	45.45
2-8673	2#12 (19x25)	.213" x .384"	13.00	65.35
2-8678	2#10 (19x23)	.243" x .436"	20.40	96.70
2-8475	3#16 (19x29)	.102" x .295"	9.75	44.25
2-8476*	4#16 (19x29)	.102" x .400"	13.00	57.45

7MM IGNITION WIRE

Tinned, copper clad steel wire conductor, rubber insulated, Hypalon jacket.

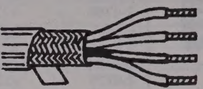
Cat. 2-8689-100 #20 (7x28) 100 ft. spool **Net $8.65**

STOCK COLORS
FOR TEFLON HOOK-UP WIRES

The Teflon insulated hook-up wires shown at the right are available in the following solid colors. Specify both desired length and color when ordering.

1 Brown
2 Red
3 Orange
4 Yellow
5 Green
6 Lt. blue
7 Violet
8 Gray
9 White
10 Black

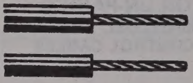
HIGH TEMPERATURE SHIELDED CABLES



MIL-W-16878-TYPE-E TEFLON INSULATED -65°C TO 200°C

Stranded silver coated copper conductors, insulated with Type E extruded TFE Teflon, color coded, cabled, braided silver plated copper Shield, white TFE Teflon tape wrapped jacket. Voltage 600 v-rms.

Cat. No.	AWG & Stranding	Nom. O.D.	Net 100'	Net 500'	Net 1000'
2-83301	1 #30 (7x38)	.074"	$28.50	$111.38	$222.75
2-83302	1 #28 (7x36)	.078"	29.52	112.88	225.75
2-83303	1 #26 (7x34)	.082"	30.75	114.75	229.50
2-83304	1 #24 (19x36)	.088"	33.00	123.75	247.50
2-83305	1 #22 (19x34)	.094"	34.50	129.00	258.00
2-83306	1 #20 (19x32)	.103"	38.40	142.35	284.70
2-83307	1 #18 (19x30)	.113"	46.50	186.60	373.20
2-83308	1 #16 (19x29)	.123"	53.40	204.00	408.00
Conductor color coding white.					
2-83315	2 #30 (7x38)	.106"	$40.35	$167.25	$334.50
2-83316	2 #28 (7x36)	.112"	42.30	171.00	342.00
2-83317	2 #26 (7x34)	.120"	43.80	174.00	348.00
2-83318	2 #24 (19x36)	.132"	46.50	184.20	368.40
2-83319	2 #22 (19x34)	.144"	53.40	204.00	408.00
2-83320	2 #20 (19x32)	.162"	56.10	228.75	457.50
2-83321	2 #18 (19x30)	.188"	70.80	292.50	585.00
2-83322	2 #16 (19x29)	.200"	91.50	380.25	760.50
Conductor color coding white, black.					
2-83330	3 #30 (7x38)	.111"	$54.00	$214.50	$429.00
2-83331	3 #28 (7x36)	.117"	54.75	219.75	439.50
2-83332	3 #26 (7x34)	.126"	57.30	235.75	469.50
2-83333	3 #24 (19x36)	.136"	63.00	258.00	516.00
2-83334	3 #22 (19x34)	.156"	70.20	288.00	576.00
2-83335	3 #20 (19x32)	.175"	81.75	335.25	670.50
2-83336	3 #18 (19x30)	.196"	97.50	396.00	792.00
2-83337	3 #16 (19x29)	.218"	138.00	573.75	1147.50
Conductor color coding white, black, red.					
2-83345	4 #30 (7x38)	.119"	$69.30	$282.00	$564.00
2-83346	4 #28 (7x36)	.126"	70.80	294.00	588.00
2-83347	4 #26 (7x34)	.135"	73.95	306.00	612.00
2-83348	4 #24 (19x36)	.151"	84.75	345.00	690.00
2-83349	4 #22 (19x34)	.166"	94.50	384.75	796.50
2-83350	4 #20 (19x32)	.185"	102.00	423.75	847.50
2-83351	4 #18 (19x30)	.215"	132.75	505.50	1101.00
2-83352	4 #16 (19x29)	.235"	177.00	727.50	1455.00
Conductor color coding white, black, red, green.					



HOOK-UP WIRE
MIL-W-16878 TEFLON-200°C

Concentrically stranded silver coated copper conductor insulated with extruded TFE Teflon. Especially suitable for internal wiring soldering applications where insulation melt back is a specific problem. Teflon insulated wires remain flexible at all times, are resistant to ozone, water, alcohol, gasoline, acids, alkalies, aromatic hydrocarbons and solvents.

TYPE-EE MIL-W-16878 TEFLON 1000 V. 200°C

Cat. No.	AWG & Stranding	Nom. O.D.	Net 25'	Net 100'	Net 500'	Net 1000'
2-83023	24 (19x36)	.053"	$2.65	$8.35	$29.40	.....
2-83025	22 (7x30)	.058"	2.70	8.85	30.68	.....
2-83026	22 (19x34)	.060"	2.85	9.55	33.95	$67.90
2-83027	20 (19x32)	.068"	3.23	11.10	40.35	80.70
2-83028	20 (7x28)	.066"	3.08	10.50	37.73	.....
2-83029	18 (19x30)	.079"	4.15	14.70	55.58	111.15
2-83030	16 (19x29)	.086"	4.50	16.35	62.33	124.65

Insulation thickness .014". Colors 1 thru 10.

TYPE E-MIL-W-16878 TEFLON 600 V. 200°C

2-83000	30 (7x38)	.033"	$1.75	$4.80	$14.03	$28.05
2-83001	28 (7x36)	.036"	1.80	4.95	14.75	28.00
2-83002	26 (7x34)	.041"	1.95	5.40	16.65	31.80
2-83003	24 (19x36)	.046"	2.18	6.60	21.38	.....
2-83004	24 (7x32)	.045"	2.03	5.70	17.55	33.60
2-83005	22 (7x30)	.051"	2.18	6.60	21.38	41.25
2-83006	22 (19x34)	.052"	2.33	7.20	24.00	23.25

Continued On Next Page.

BELDEN WIRE PRODUCTS

HOOK-UP WIRE

TYPE E-MIL-W-16878 TEFLON 600 V. CONT'D.

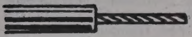
Cat. No.	AWG & Stranding	Nom. O.D.	Net 25'	Net 100'	Net 500'	Net 1000'
2-83007	20 (19x32)	.060"	$2.63	$8.25	$27.50	$55.50
2-83008	20 (7x28)	.059"	2.48	7.80	26.78	.....
2-83009	18 (19x30)	.071"	3.25	11.10	40.58	79.65
2-83010	16 (19x29)	.080"	3.85	13.50	50.70	99.90

Insulation thickness .010". Colors 1 thru 10.

TYPE ET-MIL-W-16878 TEFLON 250 V. 200°C.

2-83041	32 (7x40)	.021"	....	$4.75	....	$26.10
2-83043	30 (7x38)	.024"	.....	4.80	....	26.35
2-83045	28 (7x36)	.027"	....	4.95	....	27.75
2-83046	26 (7x34)	.031"	....	5.35	....	30.15
2-83047	24 (7x32)	.036"	....	5.50	....	31.80
2-83048	24 (19x36)	.037"	....	6.10	....	36.90
2-83049	22 (7x30)	.042"	....	6.00	....	36.25
2-83050	22 (19x34)	.044"	....	6.30	....	39.00

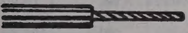
Insulation thickness .006". Colors 1 thru 10.



MW-MIL-W-76 VINYL 1000 V. 80°C

Tinned copper, vinyl insulated, medium wall. Extruded vinyl insulation is flame and ozone resistant and is inert to most chemicals, oils and solvents. Stock colors available: * 1 thru 10; † 1 thru 13; ‡ 1 thru 22; § 1 thru 30. Prices shown are for solid colors, 1 thru 13. **F OR STRIPED COLORS 14 THRU 30 ADD $0.12 PER 100 FT., $1.15 PER 1000 FT.**

Cat. No.	MIL MW-C-	-----Wire----- AWG	O.D.	Net 25'	Net 100'	Net 1000'
2-8525	-24-(7)-U	24 (7x32)	.058"	....	$1.53	$9.90
2-8524	-22-(7)-U	22 (7x30)	.064"	$ .78	1.73	11.70
2-8523	-20-(10)-U	20 (10x30)	.070"	.93	2.00	13.35
2-8522	-18-(16)-U	18 (16x30)	.080"	1.01	2.40	17.95
2-8521	-16-(26)-U	16 (26x30)	.098"	....	3.35	25.80
2-8520	-14-(41)-U	14 (41x30)	.111"	....	4.70	40.35
2-8527	-12-(65)-U	12 (65x30)	.130"	....	7.15	58.35
2-8538	-24-(1)-U	24 solid	.054"	....	1.46	8.05
2-8530	-22-(1)-U	22 solid	.059"	.74	1.46	9.15
2-8529	-20-(1)-U	20 solid	.066"	.81	1.76	11.55
2-8528	-18-(1)-U	18 solid	.074"	....	2.24	15.75
2-8531	-16-(1)-U	16 solid	.085"	....	2.81	22.45



MW-MIL-W-76 VINYL 1000 V. 90°C NYLON JACKET

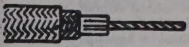
Tinned copper conductors, vinyl insulated, clear nylon jacket over all. Solid colors 1 thru 10 only.

Cat. No.	MIL Type	AWG & Stranding	Nom. O.D.	Net 100'	Net 1000'
2-8537	MW-C22(7)-J	22 (7x30)	.069"	$2.37	$16.35
2-8536	MW-C20(7)-J	20 (10x30)	.076"	2.52	19.05
2-8535	MW-C18(16)-J	18 (16x30)	.086"	3.51	25.05

MW-MIL-W-76 VINYL 1000 V. 80°C SHIELDED

Tinned copper conductors, vinyl insulated, medium wall, tinned copper shield, nylon jacket overall. White only.

Cat. No.	MIL Type	AWG & Stranding	Nom O.D.	Net 100'	Net 1000'
2-8893	MW-C22(7)-SJ	22 (7x30)	.096"	$6.30	$50.40
2-8896	MW-C20(7)-SJ	20 (10x30)	.105"	6.25	55.20
2-8892	MW-C18(16)-SJ	18 (16x30)	.114"	7.05	58.35
2-8894	MW-C16(19)-SJ	16 (26x30)	.132"	9.00	79.30



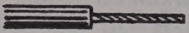
IRRADIATED PVC HOOK-UP WIRE

Heat and burn-through resistant. A 660°F soldering iron will not melt or flow the PVC and shrink-back normally encountered in the soldering of vinyl insulated wire is eliminated. Abrasion resistance superior to vinyl insulation. Voltage rating 300 peak for electronic use. Maximum operating temperature 80°C. Colors 1 thru 10. *9 only.

Cat. No.	MIL-W-16878	AWG & Stranding	Insulation	Nom. O.D.	Net 1000'
2-83402	—	#26 solid	.010"	.039"	$13.40
2-83403	—	#24 solid	.010"	.044"	13.65
2-83404	—	#22 solid	.010"	.050"	15.60
2-83412	B-26	#26 (7x36)	.010"	.039"	14.60
2-83413	B-24	#24 (7x32)	.010"	.044"	14.55
2-83414	B-22	#22 (7x30)	.010"	.050"	16.50
2-83415	B-20	#20 (7x28)	.010"	.058"	20.60
2-83416	B-18	#18 (7x26)	.010"	.068"	27.00

Note. Other sizes, temperatures and voltages are also available. Information, prices and delivery on request.

HOOK-UP WIRE



VINYL INSULATED 600 V. 105°C.

Style 1015 (CSA-600V-Type TEW). Tinned copper conductors, .031" thick vinyl insulation. Rated 2500 volts peak for electronic circuits.

Cat. No.	AWG & Stranding	Nom. Dia.	Stock Colors	Net 100'	Net 500'	Net 1000'
2-8920	#22 (7x30)	.095"	1-5,9,10,13	$1.92	.....	$12.75
2-8919	#20 (10x30)	.102"	1-5,9,10,13	2.40	.....	16.15
2-8918	#18 (16x30)	.112"	1-5,9,10,13	2.87	.....	20.50
2-8917	#16 (26x30)	.126"	1-5,9,10,13	3.68	$14.85	.....
2-8916	#14 (41x30)	.141"	1-5,9,10,13	5.20	20.35	.....

C-MIL-W-16878 VINYL 1000 V. 105°C

Tinned copper conductors, overall vinyl insulation, .018" thick.

Cat. No.	MIL Type	AWG & Stranding	Nom. dia.	Stock Colors	Net 100'	Net 1000'
2-8954	C-22	#22 (7x30)	.064"	1 thru 10	$1.92	$14.05
2-8953	C-20	#20 (7x28)	.072"	1 thru 10	2.22	17.10
2-8952	C-18	#18 (7x26)	.082"	1 thru 10	2.67	20.85
2-8951	C-16	#16 (19x29)	.091"	1 thru 10	3.30	27.60

SOLID AND STRIPED COLORS FOR HOOK-UP WIRES

Hook-up wire prices shown are for solid colors 1 thru 13. Where striped colors are available **ADD $0.12 PER 100 FT., $1.15 PER 1000 FT.** to the prices shown.

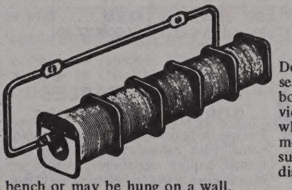
1 Brown
2 Red
3 Orange
4 Yellow
5 Green
6 Lt. Blue
7 Violet
8 Gray
9 White
10 Black
11 Tan
12 Pink
13 Dark Blue
14 White/Black
15 White/Red
16 White/Green
17 White/Yellow
18 White/Blue
19 White/Brown
20 White/Orange
21 White/Gray
22 White/Violet
23 White/Black/Red
24 White/Black/Green
25 White/Black/Yellow
26 White/Black/Blue
27 White/Black/Brown
28 White/Black/Orange
29 White/Black/Gray
30 White/Black/Violet

B-MIL-W-16878 VINYL 600 V. 105°C

Tinned copper conductors, .010" thick vinyl insulation.

Cat. No.	MIL Type	AWG & Stranding	Nom. O.D.	Stock Colors	Net 100'	Net 1000'
2-8505	B-26	#26 (7x34)	.039"	1-10, 14-22	$1.56	$11.05
2-8504	B-24	#24 (7x32)	.044"	1-10, 14-22	1.68	11.50
2-8503	B-22	#22 (7x30)	.050"	1-10, 14-22	1.89	12.50
2-8502	B-20	#20 (7x28)	.058"	1-10, 14-22	2.18	13.65
2-8501	B-18	#18 (7x26)	.068"	1-10, 14-22	2.31	17.50
2-8500	B-16	#16 (19x29)	.077"	1-10, 14-22	2.96	23.25

Note. This wire is also available with a vinyl-nylon jacket for 600 volt 115°C operation. Prices and delivery on request.

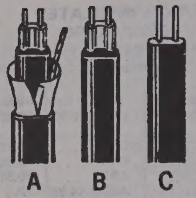


HOOK-UP WIRE KITS

Designed especially for research and development laboratories, engineers, servicemen, hobbyists, etc., who require wide assortments of wire gauges, insulations, etc. Wire rack dispenser will stand on a bench or may be hung on a wall.

Cat. No.	No. Spools	Spool Lgth.	Wire Description & Colors	Net Ea.
2-8816	8	25'	#18 (16x30) vinyl, 1000 v., 80°C Colors in kit 1, 2, 3, 4, 5, 6, 9, 10.	$8.04
2-8822	10	25'	#20 solid, vinyl, 1000 v., 80°C Colors in kit 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.	$8.10
2-8823	5	100'	#20 solid, vinyl, 1000 v., 80°C Colors in kit 2, 5, 6, 9, 10.	$8.78
2-8824	8	25'	#20 (10x30) vinyl, 1000 v., 80°C Colors in kit 1, 2, 3, 4, 5, 6, 9, 10.	$7.44
2-8825	5	100'	#20 (7x28) vinyl, 600 v., 105°C Colors in kit 2, 4, 5, 9, 10.	$10.90
2-9530	10	25'	#22 solid, vinyl, 1000 v., 80°C Colors in kit 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.	$7.35
2-9531	5	100'	#22 (7x30) vinyl, 1000 v., 80°C Colors in kit 2, 5, 6, 9, 10.	$8.65

BELDEN WIRE PRODUCTS

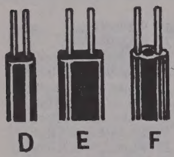


TWIN LINE FOR COLOR OR BLACK & WHITE TV

300 OHMS

Specially designed to provide color and black/white, VHF and UHF TV, and FM reception in any-area. Type 8290 is for use where reception is critical. The BELDFOIL shield, with tinned drain wire, assures a clean and strong signal by eliminating transmission line pickup of ghost signals and electrical interference. The brown polyethylene cover is impervious to sand and water, permitting it to be used in gutters, conduit or underground. Conductors are #22 (7x30) Copperweld. Overall size .305" x .515". Type 8285 is for use in uncongested areas. Conductors are #22 (7x30) Copperweld. Insulation is brown polyethylene. Overall size .255" x .486". Type 9085 is also for use in uncongested or fringe areas. Conductors are #22 (7x30) Copperweld. Insulation is brown polyethylene. Overall size .165" x .400". Types 8290 and 8285 have terminals attached on the 50, 57, 100 ft. lengths.

Cat. No.	See Fig.	Net 25′	Net 50′	Net 75′	Net 100′	Net 250′	Net 500′	Net 1000′
2-8290	A	.....	$6.45	$8.65	$10.95	$25.90	$51.75	.....
2-8285	B	.....	3.30	4.35	5.55	13.30	24.90	$49.80
2-9085	C	$1.68	2.38	3.03	3.73	.....	15.60	31.20



TWIN LINE FOR RECEIVERS & TRANSMITTERS

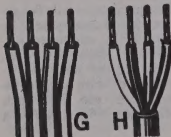
300 OHMS

Used for the lead-in to doublet or similar antennas for short-wave, AM, FM or TV reception, or to antennas for low power transmitters. Brown polyethylene insulation. Types 8230 and 8275 have 2 #20 (7x28) bare Copperweld conductors. Type 8225 has 2 #20 (7x28) bare copper conductors. Type 8275 has hollow center filled with inert gas-filled unicellular polyethylene to prevent collection of moisture. Overall size: 8230 is .072" x .400"; 8225 is .058" x .400"; 8275 is .300" x .400".

Cat. No.	See Fig.	Net 25′	Net 50′	Net 75′	Net 100′	Net 250′	Net 500′	Net 1000′
2-8230	E	$1.05	$1.52	$2.04	$2.54	$5.85	$11.85	$22.35
2-8225	E	.98	1.44	1.89	2.33	5.37	10.65	20.40
2-8275	F	.....	3.03	5.13	5.20	11.55	24.40	47.55

72 OHM TWIN LINE

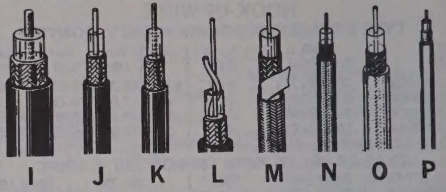
Cat. No.	See Fig.	AWG & Stranding	Nom. O.D. Inches	Net 100′	Net 250′	Net 500′
2-8222	D	2 #20 (7x28)	.074 x .128	$2.66	.....	$11.10
2-8210	D	2 #13 (7x21)	.166 x .278	13.60	$27.15	.....

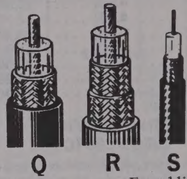


CONTROL CABLES FOR ANTENNA ROTORS

For use from control box to the antenna rotor. Flat cables (Fig. G) have one tinned copper conductor, others are bare copper. 8484 has chrome vinyl insulation, 8463 has brown polyethylene insulation. Round cables (Fig. H) have color-coded vinyl insulated conductors, with chrome vinyl jacket overall.

Cat. No.	See Fig.	AWG & Stranding	Net 50′	Net 75′	Net 100′	Net 500′	Net 1000′
2-8464	G	4 #20 (7x28)	$2.79	$3.74	$4.90	$20.50	$40.95
2-8463	G	5 #20 (7x28)	3.12	4.50	5.95	26.80	.....
2-8484	H	4 #20 (7x28)	.....	....	5.10	22.05	44.10
2-8489	H	4 #18 (16x30)	.....	....	9.55	41.80	83.60
2-8485	H	5 #20 (7x28)	.....	....	6.40	27.40	54.80
2-8488	H	8 #22 (7x30)	.....	....	7.30	32.50	65.00



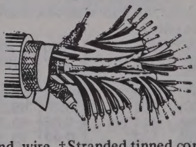


RG/U TYPE TRANSMISSION LINE CABLES

Manufactured with rigid control of concentricity and all dimensional tolerances. ‡Polyethylene insulation with black vinyl cover. §TFE Teflon insulation with either brown tinted FEP or white Teflon wrap cover. For additional characteristics ask for BELDEN ELECTRONIC WIRE & CABLE CATALOG 871.

Cat. No.	See Fig.	RG-Type	JAN-* MIL-†	Ohms Imp.	O.D. In.	Net Ft.	Net 100′	Net 500′
2-8237	I	8/U	C-17A*		.405‡	$0.22	$17.35	$69.10
2-8238	I	11/U	C-17A*		.405‡	.18	14.95	59.25
2-8240	J	58/U	C-17A*		.195‡	.11	6.10	22.30
2-8259	K	58A/U	C-17A*		.195‡	.12	7.20	26.50
2-8241	K	59/U	C-17A*		.242‡	.13	7.50	24.45
2-8263	K	59B/U	C-17D†		.242‡	.11	....	31.00
2-8254	L	62/U	C-17A*		.242‡	.14	7.95	30.15
2-83241	M	141A/U	C-17D†		.190§	.85	51.00	238.18
2-83242	Q	142B/U	C-17D†		.195§	1.05	63.00	297.75
2-83265	N	178B/U	C-17D†		.070§	.17	14.55	62.85
2-83264	N	179B/U	C-17D†		.100§	.30	25.20	108.90
2-83266	O	180B/U	C-17D†		.140§	.39	33.00	152.25
2-8267	Q	213/U	C-17D†		.405‡	.18	.....	75.90
2-8268	R	214/U	C-17D†		.425‡	.59	.....	252.10
2-83284	O	316/U	C-17D†		.089§	.28	.....	106.88
2-8218	S	....	....		.150‡	.08	.....	24.30
2-9231	R	....	....		.304‡	.28	.....	116.70
2-9251	I	8A/U	C-17D†		.405‡	.23	19.50	75.75

Note. Other RG/U cables also available. Prices & delivery on request.



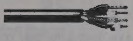
TV CAMERA CABLES

Type 8283 for color cameras, others for black/white cameras. *Stranded tinned copper, vinyl ins. †stranded tinned copper, vinyl ins., BELDFOIL shield with gnd. wire. ‡Stranded tinned copper, vinyl ins., 3 cond. under BELDFOIL shield with gnd. wire. §Stranded tinned copper, vinyl ins., group 1 and 2 (7 cond.) under BELDFOIL shield with gnd. wire. **Stranded tinned copper, vinyl ins., cabled in 3 groups of 7 cond., one group under BELDFOIL with gnd. wire. ††Stranded tinned copper, vinyl ins., 2 cond. cables under BELDFOIL shield, 2 cond. cabled, 5 cond. cabled, with gnd. wire. Maximum cables lengths: 8283, 9253, 8286 & 8284 1000 ft.; 8280 1500 ft.; 9254 & 8282 2000 ft.

Cat. No.	Group 1	Group 2	Group 3	No. Coax & Imp.	Net Ft.	Net 1000′
2-8283	4 #14*	3 #16§	67 #22§§	8 75	$1.40	$1198.50
2-9253	3 #18†	21 #22**	....	3 75	1.25	1044.00
2-8280	4 #18*	21 #22*	....	3 51	1.22	1045.50
2-8286	4 #18†	21 #22**	....	3 75	.61	514.50
2-8284	17 #22‡	4 #16*	....	3 53.5	.54	454.50
2-9254	2 #20*	9 #22††	....	2 75	.60	514.00
2-8282	8 #22*	1 #22*	2 #18*	1 50, 1 72	.50	429.00

Type 8286 has Black Hypalon jacket, all others chrome vinyl jacket. Overall jacket diameter: 8283 1.22"; 9253 .810"; 8280 .750"; 8286 .730"; 8284 .800"; 9354 .550"; 8282 .470".

BELDEN WIRE PRODUCTS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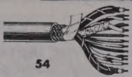
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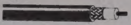
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CLOSED CIRCUIT TELEVISION CABLES

Belden CCTV and VTR cables are designed to deliver reliable performance, rugged service life and easy installation. They are ideally suited to most closed-circuit TV applications and video tape recorder systems in commercial, industrial and home use taday. 9254 is recommended for remote control, closed-circuit and cue line applications. 9255 through 9258 are excellent replacements for Sony, Panasonic, Concord, Dage and other original equipment cables. 9259–9262 are designed for mobile cameras, remote control pan-and-tilt equipment and other applications requiring flexibility and strength.

13 CONDUCTOR CAMERA EXTENSION CABLE (9254)

Specifications: 2-20 AWG (10x30) tinned copper, vinyl insulated, color coded. 9-22 AWG (7x30) tinned copper, vinyl insulated, 2 conductors unshielded. 2-Foam polypropylene insulated coaxial cables. Nom. Impedance 75 ohms, color coded. Tinned copper braid shield. Chrome vinyl jacket .550" Nom. O.D. U.L., Inc. listed.

4-CONDUCTOR VIDEO MONITOR & EXTENSION CABLE (9255)

Specifications: 1-20 AWG (16x32) TC, polyethylene insulated. 1-28 AWG (7x36) TC, vinyl insulated, TC spiral wrapped shield, vinyl jacket. 1-50 ohm coax, 27 AWG (7x35) TC conductor, foam polyethylene insulation. TC braid shield. 1-50 ohm coax, 27 AWG (7x35) TC conductor, polyethylene insulation, TC braid shield. Overall black vinyl jacket, .226" nominal O.D.

4-CONDUCTOR VIDEO MONITOR & EXTENSION CABLE (9256)

Specifications: 2-24 AWG (7x32) TC, vinyl insulated, TC spiral wrapped shield, vinyl jacket. 2-50 ohm coax, 25 AWG (7x33) BC braid shield, vinyl jacket (one black, one white). Overall black vinyl jacket, .310" nominal O.D.

7-CONDUCTOR CAMERA EXTENSION CABLE (9257)

Specifications: 1-50 ohm coax, 27 AWG (7x35) TC conductor, polyethylene insulation. TC braid shield, polyester tape wrapped. 1-28 AWG (7x36) TC, vinyl insulation, BC spiral wrapped shield, black vinyl jacket. 4-27 AWG (7x36) TC conductor, vinyl insulated. 1-24 AWG (7x32) TC conductor, vinyl insulated. Overall gray vinyl jacket, .245" nominal O.D.

8-CONDUCTOR VIDEO, AUDIO AND POWER EXTENSION CABLE (9258)

Specifications: 6-22 AWG (16x34) TC conductors, vinyl insulated. 1-50 ohm coax, 30 AWG (7x38) TC conductor, polyethylene insulated, BC braid shield, polyester tape wrapped. 1-22 AWG (16x34) TC conductor, vinyl insulated, TC braid shield, polyester tape wrapped. Overall black vinyl jacket, .225" nominal O.D.

RG-59 TYPE COAX CABLE WITH STRANDED CENTER CONDUCTOR (9259)

Specifications: 22 AWG stranded BC conductor, foam polyethylene insulation, BC braid shield, black vinyl jacket, 75 ohm, .242" nominal O.D.

6-CONDUCTOR SHIELDED REMOTE CONTROL CABLE (9260)

Specifications: 6-20 AWG (7x28) TC conductors, vinyl insulated, color coded. Overall TC braid shield. Overall gray vinyl jacket, .410" nominal O.D.

12-CONDUCTOR SHIELDED REMOTE CONTROL CABLE (9261)

Specifications: 12-20 AWG (7x28) TC conductors, vinyl insulated, color coded. Overall gray vinyl jacket, .410" nominal O.D. Overall TC braid shield.

CONTINUED IN NEXT COLUMN

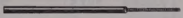
TELEVISION CABLES CONT'D.

13-CONDUCTOR REMOTE CONTROL & VIDEO CABLE (9262)

Specifications: 12-20 AWG (7x28) TC conductors, vinyl insulated, color coded. 1-75 ohm coax, 22 AWG stranded BC conductor, foam polyethylene insulated, BC braid shield, Polyester tape wrapped. Overall TC braid shield. Overall gray vinyl jacket, .425" nominal O.D.

Cat. No.	Net 50'	Net 100'	Net 500'	Net 1000'
2-9254	....	$52.50	$257.25	$514.50
2-9255	11.70	19.50	81.45	162.90
2-9256	14.40	24.00	99.75	199.50
2-9257	12.75	21.15	88.30	176.50
2-9258	13.20	22.05	91.90	183.75
2-9259	4.65	7.90	27.90	55.80
2-9260	10.80	18.00	74.10	148.20
2-9261	18.75	30.60	127.90	255.75
2-9262	24.75	41.70	174.00	348.00

U.L. OR C.S.A. LEAD WIRE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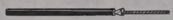
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C

VINYL INSULATION 105C–600V

Vinyl plastic insulation is fast stripping, resists oil, solvents and ozone. The colors are bright and remain distinct after processing. Applications include motors, transformers, fluorescent ballasts and fixtures, switchboards, panels, controls, rectifiers, and electronic circuits. See illustration A. U.L. & C.S.A. listed.

Cat. No.	AWG & Stranding	Nom. O.D.	Insul. Thick.	Available* Stock Colors.	Per M Ft. 1-4 reels
2-34124	24 solid	.085	1/32	2,4,10	$5.95
2-34122	22 solid	.090	1/32	1 thru 5,9,10,13	6.60
2-30622	22 (7x30)	.094	1/32	1 thru 5,9,10,13	9.40
2-32722	22 (7x30)†	.094	1/32	1 thru 5,7,8,9,10,13	8.55
2-30620	20 (10x30)	.100	1/32	1 thru 5,9,10,13	11.90
2-32720	20 (7x28)†	.100	1/32	2 thru 5,9,10,13	10.90
2-30618	18 (16x30)	.110	1/32	1 thru 5,9,10,13	13.65
2-32718	18 (16x30)†	.109	1/32	2,4,5,9,10,13	14.20
2-30616	16 (26x30)	.123	1/32	1 thru 5,9,10,13	22.05
2-30614	14 (41x30)	.141	1/32	10 only	25.65
2-30612	12 (65x30)	.162	1/32	10 only	44.50
2-30610	10 (65x28)	.185	1/32	10 only	55.05
2-30608	8 (84x27)	.253	3/64	10 only	98.20

VINYL INSULATION 80C–300V U.L. LISTED

Cat. No.	AWG & Stranding	Nom. O.D.	Insul. Thick.	Available* Stock Colors.	Per M Ft. 1-4 reels
2-32822	22 (7x30)†	.064	1/64	1 thru 5,7,8,9,10,13	$7.45
2-32820	20 (7x28)†	.070	1/64	9,10, only	9.10
2-33218	18 (16x30)	.080	1/64	10 only	13.00

† UNISTRAND®

‡XL-DUR INSULATION 125C–600V U.L. LISTED (B)

Cat. No.	AWG & Stranding	Nom. O.D.	Insul. Thick.	Available* Stock Colors.	Per M Ft. 1-4 reels
2-35622	22 (7x30)	.094	1/32	10 only	$12.25
2-35620	20 (10x30)	.102	1/32	10 only	16.60
2-35618	18 (16x30)	.112	1/32	10 only	18.85
2-35616	16 (26x30)	.125	1/32	10 only	22.95
2-35614	14 (41x30)	.143	1/32	10 only	31.95

‡ Cross-linked polyethylene applied in a single extrusion.

NEOPRENE INSULATION 90C–600V U.L. LISTED (A)

Cat. No.	AWG & Stranding	Nom. O.D.	Insul. Thick.	Available* Stock Colors.	Per M Ft. 1-4 reels
2-32518	18 (16x30)	.143	3/64	2,4,6,9,10	$21.45
2-32516	16 (26x30)	.156	3/64	1,2,4,6,9,10	24.10
2-31514	14 (41x30)	.179	3/64	2,4,5,10	41.80

HYPALON INSULATION 105C–600V U.L. LISTED (B)

Cat. No.	AWG & Stranding	Nom. O.D.	Insul. Thick.	Available* Stock Colors.	Per M Ft. 1-4 reels
2-34418	18 (16x30)	.150	3/64	2,4,5,8,9,10,13	$28.00
2-34416	16 (26x30)	.164	3/64	2,4,5,8,9,10,13	36.20
2-34414	14 (41x30)	.179	3/64	2,4,5,8,9,10,13	47.65

SILICONE RUBBER GLASS BRAID LACQUERED INSULATION (C)

200C–600V U.L. AND C.S.A. LISTED

Cat. No.	AWG & Stranding	Nom. O.D.	Insul. Thick.	Available* Stock Colors.	Per M Ft. 1-4 reels
2-32418	18 (7x26)	.124	1/32	9,10 only	$47.80
2-32416	16 (7x24)	.136	1/32	9,10 only	59.00
2-32414	14 (7x22)	.167	1/32	9,10 only	82.65

150C–600V U.L. AND C.S.A. LISTED

Cat. No.	AWG & Stranding	Nom. O.D.	Insul. Thick.	Available* Stock Colors.	Per M Ft. 1-4 reels
2-30822	22 (7x30)	.106	1/32	9 only	$34.75
2-30820	20 (10x30)	.112	1/32	9,10 only	37.50
2-30818	18 (16x30)	.122	1/32	2,4,5,9,10,13	43.95
2-30816	16 (26x30)	.135	1/32	9,10 only	54.85
2-30814	14 (41x30)	.163	1/32	9,10 only	71.70

* COLOR CODE CHART

1	Brown	4	Yellow	7	Violet	10	Black
2	Red	5	Green	8	Gray	11	Tan
3	Orange	6	Light Blue	9	White	12	Blue

BELDEN WIRE PRODUCTS

BELDSOL MAGNET WIRE

A dual film insulated magnet wire that combines the excellent dielectric characteristics of Polyurethane and the known toughness and solvent resistance offered by a overcoat of nylon. This wire is rated by IEEE tests for 130°C usage and will solder without removal at 750°F. Complies with Mil-W-583 specifications.

Wire Size	1/4 Lb. Spool Cat.	Ft.	Net	1/2 Lb. Spool Cat.	Ft.	Net
14	....	....	....	2-8047	40	$1.79
16	....	....	....	2-8048	63	1.79
18	....	....	....	2-8049	100	1.82
20	....	....	....	2-8050	160	1.82
22	....	....	....	2-8051	254	1.82
24	....	....	....	2-8052	404	1.85
26	....	....	....	2-8053	645	1.92
28	2-8040	510	$1.29	2-8054	1020	2.00
30	2-8041	807	1.37	2-8055	1615	2.10
32	2-8042	1257	1.50	2-8056	2515	2.48
34	2-8043	2030	1.56	2-8057	4060	2.64
36	2-8044	3200	1.74	2-8058	6400	3.02
38	2-8045	5070	2.21	......	.....	....
40*	2-8046	8050	2.97	......	.....	....

*Beldure® 105°C Polyurethane film.

POLY-THERMALEZE MAGNET WIRE

HIGH TEMPERATURE

A dual coated magnet wire. The base coat is a cross-linked, modified polyester; the top coat is an amide-imide polymer; rated for 180°C usage and has an exceptional ability to resist solvents and abuse in difficult windings. Complies with Mil-W-583 specs.

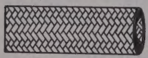
Wire Size	1/2 Lb. Spool Cat.	Ft.	Net	1 Lb. Spool Cat.	Ft.	Net
14	2-8059	40	$1.79	2-8073	80	$3.05
16	2-8060	63	1.82	2-8074	126	3.15
18	2-8061	100	1.85	2-8075	199	3.30
20	2-8062	157	1.88	2-8076	315	3.30
22	2-8063	250	1.89	2-8077	501	3.30
24	2-8064	396	1.97	2-8078	793	3.38
26	2-8065	630	2.04	2-8079	1260	3.60
28	2-8066	995	2.21	2-8080	1990	3.90
30	2-8067	1570	2.45	2-8081	3140	4.33
32	2-8068	2440	2.63	2-8082	4880	4.80
34	2-8069	3930	2.94	2-8083	7860	5.65
36	2-8070	6200	3.47	2-8084	12400	6.75
38	2-8071	9700	4.13	2-8085	19400	8.10
40	2-8072	16050	5.00	2-8086	32100	10.65

Note. Poly-Thermaleze Magnet Wire is also available in 3-Lb. spools in sizes 24 thru 30, and on 5-Lb. spools 14 thru 22. Prices and delivery quoted on request.

SOLID TINNED BUS WIRE

Solid tinned copper wire made in accordance with Federal Specifications QQ-W-243. Furnished on spools.

Cat. No.	Wire AWG	Net 100′	Net 1000′	Cat. No.	Wire AWG	Net 100′	Net 1000′
2-8025	30	$0.98	$4.05	2-8020	20	$1.26	$8.85
2-8024	28	.98	4.35	2-8019	18	1.70	12.75
2-8023	26	1.01	4.41	2-8013	16	2.40	20.50
2-8022	24	1.04	5.35	2-8012	14	3.68	30.75
2-8021	22	1.07	6.45	2-8011	12	5.40	.....



COPPER BRAID
FOR SHIELDING AND BONDING

Woven from multiple strands of tinned copper wire. Used for shielding component parts, cables, etc., in electronic equipment, or for flexible ground leads in mobile or cushion-mounted equipment. *Specify length by adding suffix -10, -50 or -250 when ordering.

Cat. No.	Stranding	Oval I.D.	Flat Width	Max. Amps	Net 10′	Net 50′	Net 250′
2-8654*	72x36	.109"	.125"	16	$1.11	$3.11	$13.50
2-8664*	96x36	.125"	.156"	20	1.23	3.59	15.40
2-8660*	96x34	.156"	.218"	27	1.05	3.15	13.95
2-8668*	120x34	.187"	.312"	30	1.47	4.32	18.45
2-8661*	192x34	.500"	.562"	42	1.41	4.94	23.05
2-8669*	336x34	.625"	.687"	61	2.48	10.60	50.50
2-8671*	864x36	....	.937"	84	3.75	17.25	83.65
2-8670*	480x30	....	.750"	145	5.35	23.85	114.00

Other sizes are also available. Prices and delivery on request.

ANTENNA WIRE

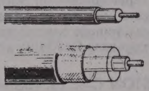
For broadcast, short-wave, and amateur transmitting and receiving antennas. Types 8002 and 8000 are stranded bare copperweld. Type 8008 is solid copper with Belden heavy Poly-Thermaleze insulation.

Cat. No.	Wire Description	Net 50′	Net 100′	Net 500′	Net 1000′
2-8002	16 (7x24) copperweld	$1.29	$2.19	.....	....
2-8000	14 (7x22) copperweld	1.80	3.15	.....	28.45
2-8009	14 solid insulated copper	....	4.05	16.80	.....

ALUMINUM GROUND WIRE

Commonly used for a direct grounding of TV antenna arrays. Supplied in ten interconnected 50 ft. rolls, or on a 500 ft. spool.

Cat. No.	Wire Description	Net 50′	Net 500′
2-8018	#8, .128" dia. aluminum ground wire	$1.40	$11.40



HIGH VOLTAGE WIRE

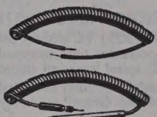
For use in testing high voltage equipment and apparatus. KORONA-GUARD® design incorporates the use of conductive polyethylene applied over the center conductor and bonded to the polyethylene dielectric material. This provides uniform voltage stress distribution around the center conductor and results in a reduction of degradation due to internal corona. Types 8866 and 8868 have red vinyl jacket, all others are black. Tinned copper conductors.

Cat. No.	AWG & Stranding	Nom. O.D.	Wrkg. V.	Net 25′	Net 100′	Net 500′
2-8866	18 (16x30)	.208"	40 KV-DC	$2.46	$6.90	$29.65
2-8868	22 (7x30)	.150"	25 KV-DC	1.53	3.90	14.70
2-8869	22 (7x30)	.120"	17 KV-DC	1.31	3.30	12.00

SHIELDED HIGH VOLTAGE WIRE

With tinned copper braid, black polyethylene jacket. *Copperweld. †Tinned copper braid equivalent to 16 AWG.

Cat. No.	AWG & Stranding	Nom. O.D.	Wrkg. V.	Net 25′	Net 100′	Net 250′
2-8870	22 solid*	.440"	80 KV-DC	......	$41.35	103.20
2-8871	16 braided†	.830"	200 KV-DC	$46.50	185.95	464.85



COILED TEST PROD WIRE
RETRACTABLE

Stranded #20 (42x36) AWG tinned copper conductors with rubber insulation. Overall dia. .173 inches, working voltage 5 KV intermittent. 5 foot length retracts to 8 inches. Type 8878 has 4" long test prods with solderless pin tips. Test prods are .375" dia. Both 8878 and 8879 are furnished in pairs, one each of red and black.

Cat. 2-8878	Coiled leads with test prods	Net pr. $3.90
Cat. 2-8879	Coiled test leads only	Net pr. 1.68

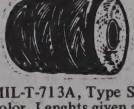
STRAIGHT TEST PROD WIRE

Tinned copper conductors, separator, rubber insulated. Available in red or black. Specify when ordering. *7' of red and 7' of black.

Cat. No.	AWG & Stranding	KV DC	Net 10′	Net 14′*	Net 25′	Net 100′	Net 500′
2-8899	18 (65x36)	5	$0.93	$1.02	$1.47	$4.73	$17.40
2-8897†	18 (65x36)	5	....	....	....	....	19.90
2-8898	18 (65x36)	10	1.35	....	2.43	6.30	26.65
2-8890	24 (45x40)	1	....	....	1.23	3.03	12.85

†Per MIL-W-13169.

SMITH NYLON LACING CORD
FOR MULTIPLE CABLES



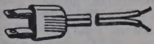
For tying and lacing multi-wire cables, harnesses, etc., in electronic or electrical equipment. Supplied in 1 pound quantities, wound on a cardboard tube. Meets MIL-T-713A, Type S, Composition P, Classes 3, 2 and 1. Natural color. Lenghts given are approximate.

Cat. 242-734	70 lb. test, 600 yards	Net $9.00
Cat. 242-735	48 lb. test, 800 yards	Net $9.30
Cat. 242-736	32 lb. test, 1140 yards	Net $9.60

POWER CORDS & ACCESSORIES

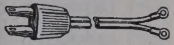
BELDEN REPLACEMENT CORDS

Belden Power Cords are available in two and three conductor types for every industrial and home use. They are all approved by the Underwriters' Laboratories for use as listed below.



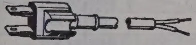
For use on lamps, radios, desk fans and small appliances. Firmly attached molded vinyl plugs. *SPT-1 vinyl insulated, stranded parallel cord. †SP-1 rubber insulated.

Cat. No.	Lgth. Ft.	Wire AWG	Colors Available	Net Ea.	Net 50	Net 100
2-17106*	6	#18 (41x34)	Brn/gray/ivory	$0.42	.....	$37.00
2-17109*	9	#18 (41x34)	Brn/white	.47	$23.50	.....
2-17112*	12	#18 (41x34)	Brn/white	.62	28.00	.....
2-17126†	6	#18 (41x34)	Brown	.51	.....	46.00
2-17129†	9	#18 (41x34)	Brown	.64	28.50	.....



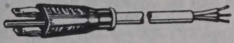
For toasters, waffle irons, bottle warmers and kitchen stove timers where the cord is permanently attached to the appliance. 17826 has eyelet lugs, is rated 15 amps at 125 volts. 17806 has split and stripped cord ends, is rated 10 amps. HPN insulated parallel conductors.

Cat. No.	Lgth. Ft.	Wire AWG	Colors Available	Net Ea.	Net 50	Net 100
2-17826	6	#16 (65x34)	Black only	$0.62	$28.00	.....
2-17806	6	#18 (41x34)	Black only	.51	23.00	.....



For food mixers, blenders and small appliances. Longer lengths are used for vacuum sweepers, polishers, etc. Molded vinyl cord-holder plug. Tubular outer jacket stripped for 1.5", conductors for .625". *SVT vinyl insulation. †SV rubber insulation. ‡SJ rubber insulation.

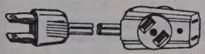
Cat. No.	Lgth. Ft.	Wire AWG	Colors Available	Net Ea.	Net 50	Net 100
2-17205*	6	#18 (41x34)	Black/gray	$0.48	$21.50	.....
2-17206†	6	#18 (41x34)	Gray	.58	25.50	.....
2-17308‡	8	#18 (16x30)	Black	.69	.....	$61.00
2-17310‡	10	#18 (16x30)	Black	.78	.....	70.00
2-17328‡	8	#16 (26x30)	Black	.82	.....	73.00
2-17330‡	10	#16 (26x30)	Black	.99	.....	89.00
2-17220†	20	#18 (41x34)	Blk/brn/gray	1.42	63.50	.....
2-17222*	20	#18 (41x34)	Blk/brn/gray	1.18	50.30	.....
2-17230*	30	#18 (41x34)	Blk/brn/white	1.65	73.50	.....



For use on power tools requiring a third wire for grounding purposes. Molded 3-pin vinyl plug. Tubular outer jacket stripped for 2", conductors are stripped for .625". ‡SJ rubber insulation, §S rubber.

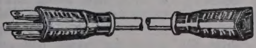
Cat. No.	Lgth. Ft.	Wire AWG	Color	Net Ea.	Net 15	Net 25	Net 50
2-17406‡	6	#18 (16x30)	Black	$0.78	.....	.....	$35.00
2-17408‡	8	#18 (16x30)	Black	.91	.....	.....	41.00
2-17412‡	12	#18 (41x34)	Black	1.34	.....	$30.00	.....
2-17419‡	9	#16 (65x34)	Black	1.28	.....	28.50	.....
2-17422‡	12	#16 (65x34)	Black	1.62	$21.60	.....	.....
2-17425‡	15	#16 (65x34)	Black	2.22	33.30	.....	.....
2-17629§	9	#14 (41x30)	Black	2.34	.....	.....	.....
2-17635§	15	#14 (41x30)	Black	4.11	.....	.....	.....

BELDEN EXTENSION CORDS



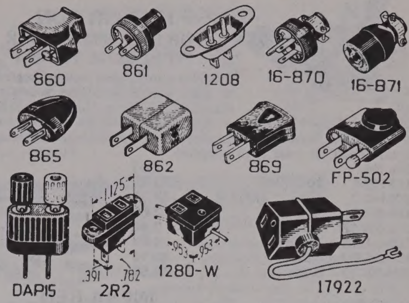
With molded vinyl plug, SPT-1 vinyl parallel cord, and three-way molded cube receptacle. Used for light appliances.

Cat. No.	Lgth. Ft.	Wire AWG	Colors Available	Net Ea.	Net 50
2-17156	6	#18 (41x34)	Brn/ivory	$0.45	$20.00
2-17159	9	#18 (41x34)	Brn/ivory	.58	25.50
2-17162	12	#18 (41x34)	Brn/ivory	.72	32.00
2-17165	15	#18 (41x34)	Brn/ivory	.78	35.00



3-pin (1 gnd.) molded plug and receptacle with bright yellow conductors. Used for power tools, lawn mowers, hedge clippers, etc. *SJT vinyl insulation. †ST vinyl insulation.

Cat. No.	Lgth. Ft.	Wire AWG	Color	Net Ea.	Net 5
2-17491*	25	#18 (16x30)	Yellow	$2.61	$11.65
2-17494*	25	#16 (26x30)	Yellow	3.25	14.50
2-17495*	50	#16 (26x30)	Yellow	6.32	.....
2-17697†	100	#14 (41x30)	Yellow	21.41	.....



ELECTRICAL ACCESSORIES

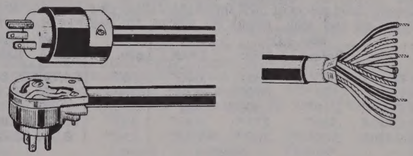
For general replacement on power cords. Type FP-502 has built-in receptacles for two Type 3AG fuses, provides extra protection for any appliance. DAP 15 has two 5-way binding posts, adapts leads or wires to a-c outlet. Type 17922 adapts 3-pin plugs on appliances and power tools to standard 2-pin outlets, has ground wire. Types 2R2 and 1280-W are used on equipment for outlets to accessories. *UL app.

FOR 2-WIRE CORDS

Cat.	Description	Net
59-860	Flat molded plastic, screw terminals*	$0.18
59-861	Heavy-duty molded rubber, screw terminals	.18
59-865	Stremlined rubber plug, spring blades*	.25
59-869	Jiffy plug. No wire stripping required	.20
59-862	Plastic cube tap with 3 receptacles	.30
340-FP-502	Fused molded plastic.* Less 3AG fuses	.45
14-2R2	For recessed chassis mounting	.23
27-DAP15	Adapter, 5-way posts to power plug	2.00
242-1208	Male receptacle for TV cheater cords	.09

FOR 3-WIRE CORDS

Cat.	Description	Net
2-17922	Adapts to standard outlet, with gnd. wire	.32
242-1280-W	Snap-in recessed recept. Wire leads*	.42
59-16-870	Heavy-duty rubber plug. Screw terminals	.90
59-16-871	Heavy-duty rubber recept. Screw terminals	1.80



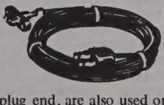
SJT TYPE LOW LEAKAGE POWER CORDS

8480 SJT type cord is a low leakage 60-cycle power cord designed to reduce the hazards of shock resulting from current leakage through the cord. 17300 cords feature heavy-duty, safety-grip wall plugs of tough, chemical-resistant Lexan. 17301 cords feature a tough, impact-resistant Nylon plug. 17300 plugs, developed especially for medical instrumentation equipment, feature a transparent cover for visual inspection of the grounding wire connections. The 90 angle of 17300 plugs permit cord to extend flat along the wall. 17301 plugs are opaque and cord exits at 180 to the wall.

Cat. No.	Description	Net
2-17300	Plug with 8 foot SJT power cord	$9.28
2-17301	Plug with 8 foot SJT power cord	8.88

Cat.		Net 100′	250′	500′	1000′
2-8480	SJT Power cord	$50.40	$105.00	$210.00	$420.00

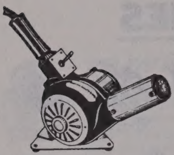
TV LINE CORDS



Used to power TV sets when protective back is removed during service operations. Type 8874 is popularly known as a "Cheater Cord". Types 8895 and 8889 are similar, but do not have ears on TV plug end, are also used on small appliances. Type 8875 is an extension for "Cheater Cords".

Cat. 2-8874	6 ft. "Cheater Cord" for TV sets	Net $0.86
Cat. 2-8895	6 ft. for TV sets and appliances	Net $0.57
Cat. 2-8889	9 ft. for TV sets and appliances	Net $0.68
Cat. 2-8875	6 ft. "Cheater" extension cord	Net $0.60

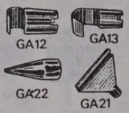
ALPHA WIRE PRODUCTS

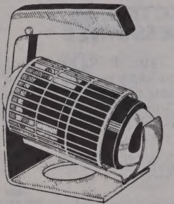


HOT AIR GUN
FOR USE WITH SHRINK FIT PLASTIC TUBING

Provides a controlled flow of heated air to area where shrinkage is required. Universal 115 v. ac/dc motor delivers 35 CFM at 3000 FPM velocity. Adjustable air intake to control temperature. Baffles concentrate heat to a confined area. *Adapter nozzle must be used with adapters.

Cat. No.		Net
319-HG-1	To 500°F..	$53.05
319-HG-2	750° to 1000°F.	63.10
319-AN-1*	Adapter	2.66
319-GA-12	Baffle	2.99
319-GA-13	Baffle	4.99
319-GA-21	Baffle	23.16
319-GA-22	Baffle	15.50





INFRA-RED HEAT GUN

Shrinks tubing safely in seconds. Elipsoidal reflector focuses heat from quartz iodine lamp onto the tubing. Most visible light optically filtered to eliminate eyestrain. Reflectors permit operator to observe shrinking process, minimizing faulty installation. Noiseless, lightweight, no annoying heat build-up. Includes interchangeable tubing reflectors and small sleeve reflector. Input power, 110 VAC, 60 Hz, 4.2 amps. Lamplife, more than 1000 hrs. (intermittent).

319-FG-5 Infra-Red Heat Gun **Net $225.00**

MINIATURE HOT AIR GUN FG-1

A new miniature heat gun that has been developed for shrinking all FIT tubing. A durable, electric motor driver unit that delivers a high volume of air to the nozzle. Easily replaceable heat elements. 3 position rocker switch. Lightweight **(1.5 lbs)**. Use as bench or hand unit. Amperage rating: 7, voltage: 115 AC. Typical Temperatures: 175°C without adapter, 205°C with adapter only, 230°C with tubing reflector. Temperatures will vary with VAC fluctuations.

Cat. FG-1 Heat Gun **Net $39.00**

SHRINK-FIT CAPS

These are short pieces of 50% shrinkable tubing closed on one end. For use on end seals, covers for splices, etc. See Fig. B above.

Cat. No.	Min. I.D. Before	Min. I.D. After	Wall Thick.	Nom. Lgth.	Net 100	Net 1000
319-CAP-1	.063"	.025"	.016"	.750"	$4.19	$38.84
319-CAP-2	.125"	.050"	.020"	1.000"	5.25	49.38
319-CAP-3	.250"	1.000"	.025"	1.000"	7.09	67.76
319-CAP-4	.350"	.175"	.035"	1.333"	20.73	204.09
319-CAP-5	.500"	.200"	.030"	1.250"	8.93	86.08

SHRINK-FIT MARKERS

For identifying wires, terminations, cables, etc. Tubing shrinks 50% when heated. Markers consist of .750" lengths of black tubing with white figures from 1 to 50, or letters from A to Z. In partioned plastic box.

Cat. No.	Wire O.D.	Kit Contains	Net Each
319-MRK-A-NS	.049" - .065"	2 ea. figures 1 thru 50	$3.40
319-MRK-B-NS	.066" - .095"	2 ea. figures 1 thru 50	3.40
319-MRK-C-NS	.096" - .150"	2 ea. figures 1 thru 50	3.40
319-MRK-A-LS	.049" - .098"	2 ea. letters A thru Z	3.40
319-MRK-B-LS	.066" - .095"	2 ea. letters A thru Z	3.40
319-MRK-C-LS	.096" - .150"	2 ea. letters A thru Z	3.40

NYLON FLAT BRAIDED TAPE

Type GE is a rubber-like resin which has fungicidal properties, melts in excess of 190°F., will not flow at 140°F. Type MW is a micro-crystalline wax with a melting point above 130°F., is pliable and soft with excellent knot retention, meets Spec. MIL-T-713. Type AM is a thermoplastic resin, wax-free, with a melting point above 350°F. Type SR has a special coating of fungicidal synthetic rubber. Soft and pliable, easy to handle.

Cat. No.	Type Finish	Nom. Width	Thickness	Standard Put-Up	Net White	Net Black
319-LC-132	GE	.0937"	.014"	500 yds.	$8.45	$9.14
319-LC-134	MW	.0625"	.010"	500 yds.	5.41	6.09
319-LC-136	MW	.0937"	.014"	500 yds.	8.45	9.14
319-LC-140	SR	.0937"	.014"	500 yds.	8.45	9.14
319-LC-143	AM	.0937"	.014"	500 yds.	8.45	9.14

Tensile strength 50 pounds for all types.

PVC-105 PLASTIC SLEEVING
MIL-I-631D SPECS.

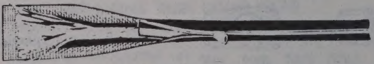
A flexible insulating sleeve for general electronic, aircraft and electrical applications at temperatures to 105°C. Highly resistant to oils, chemicals and solvents. †Available colors: 1-clear, 2-black, 3-white, 4-yellow, 5-red, 6-green. ★Be sure to include entire Cat. No. when ordering i.e., 319-PVC-105/24. Specify color.

Cat. No. 319-★	†	Nominal Size	Nominal I.D.	Wall	Std. Pkg. 100'	Std. Pkg. 500'	Std. Pkg. 1000'
PVC-105/24	1-6	#24	.022"	.013"	$2.43	$8.80	$13.00
PVC-105/22	1-6	#22	.027"	.012"	2.44	8.85	13.10
PVC-105/20	1-6	#20	.034"	.016"	2.49	9.05	13.50
PVC-105/18	1-6	#18	.042"	.016"	2.58	9.40	13.80
PVC-105/16	1-6	#16	.053"	.016"	2.72	10.00	14.00
PVC-105/14	1-6	#14	.066"	.016"	2.89	9.95	.....
PVC-105/12	1-6	#12	.085"	.016"	3.07	10.70	.....
PVC-105/10	1-6	#10	.106"	.016"	3.27	11.55	.....
PVC-105/8	1-6	#8	.133"	.020"	4.57	16.95	.....
PVC-105/6	1-6	#6	.166"	.020"	5.19	19.55	.....
					25'	100'	250'
PVC-105/4	1-6	#4	.208"	.020"	....	6.00	13.75
PVC-105/2	1-6	#2	.263"	.020"	....	6.91	16.03
PVC-105/0	1,2,3	#0	.330"	.020"	....	7.98	18.70
PVC-105/5/16"	1,2,3	5/16"	.312"	.025"	2.48	9.42	22.30
PVC-105/3/8"	1,2,3	3/8"	.375"	.025"	2.83	10.81	25.78
PVC-105/1/2"	1,2,3	½"	.500"	.025"	3.44	12.77	.....
PVC-105/5/8"	1,2,3	5/8"	.625"	.030"	4.85	18.38	.....
					25'	50'	
PVC-105/3/4"	1,2,3	¾"	.750"	.035"	6.59	12.67	.....
PVC-105/7/8"	1,2,3	7/8"	.875"	.035"	7.38	14.25	.....
PVC-105/1"	1,2,3	1"	1.000"	.035"	8.21	15.92	.....
PVC-105/1¼"	1,2	1¼"	1.250"	.040"	11.29	22.07	.....
PVC-105/1½"	1,2	1½"	1.500"	.045"	14.55	28.60	.....
PVC-105/2"	1,2	2"	2.000"	.060"	24.75	49.00	.....
PVC-105/2½"	1,2	2½"	2.500"	.070"	34.79	69.07	.....

EXTRUDED TEFLON TUBING
MIL-I-22129B SPECS.

A thin, flexible insulation which remains stable at high frequencies and high temperatures up to 250°C. It will not crack or become brittle during ageing. It has zero moisture absorption, will not shrink back during soldering process and will not melt or flow. Type TFT-200/30 through TFT-200/16 is available either natural or black in color. Type TFT-250 sizes are available in natural color only. Nominal I.D. sizes are the same as equivalent sizes listed in the PVC-105 listing above. Type TFT-200 and TFT-250 are also available in sizes to AWG 0. Prices and delivery will be quoted on request.

THIN WALL TFT-200			STD. WALL TFT-250		
Cat. No. & AWG	**Nom. Wall**	**Net 100'**	**Cat. No. & AWG**	**Nom. Wall**	**Net 100'**
319-TFT-200/30	.009"	$9.00	....	....	....
319-TFT-200/28	.009"	8.00	....	....	....
319-TFT-200/26	.010"	7.70	....	....	....
319-TFT-200/24	.010"	7.70	319-TFT-250/24	.012"	$10.01
319-TFT-200/22	.010"	9.50	319-TFT-250/22	.012"	11.23
319-TFT-200/20	.012"	12.00	319-TFT-250/20	.016"	15.19
319-TFT-200/18	.012"	12.98	319-TFT-250/18	.016"	18.70
319-TFT-200/16	.012"	14.53	319-TFT-250/16	.016"	21.78



ALPHA POLYVINYLCHLORIDE ZIPPER TUBING

All-purpose, easy-to-use jacketing material; zips on in seconds without disconnecting or disturbing connection. Track thickness (when closed), .095"; dielectric strength, 759 V/mil; tensile strength, 3,810 psi; ultimate elongation, 255%; operating temperature, -20 C to +105 C; fungus proff; self-extinguishing; lateral pull strength (permanently sealed) 59.8 #/in. One metal slider supplied with every 25 feet. MIL-I-631D, grade C materials. Wall thickness, .020". Clear or black. * Cannot be closed with slider; must be done manually. Write for prices on larger put-ups.

Cat. 319-★	Net 25'	Net 50'	Cat. 319-★	Net 25'	Net 50'
ZIP-31-1/4"	$11.10	$21.90	ZIP-31-1"	$12.30	$24.20
ZIP-31-3/8"	11.40	22.50	ZIP-31-1-1/8"	12.76	25.20
ZIP-31-1/2"	11.56	22.80	ZIP-31-1-1/4"	12.90	25.50
ZIP-31-5/8"	11.70	23.10	ZIP-31-1-1/2"	13.36	26.40
ZIP-31-3/4"	11.86	23.40	ZIP-31-1-3/4"	13.80	27.30
ZIP-31-7/8"	12.16	24.00	ZIP-31-2"	14.10	27.90

★ Include complete cat. no. i.e., 319-ZIP-31-1/4".

ALPHA SHRINK-FIT TUBING

TYPE FIT-105
WITH 50% SHRINKAGE

An easy-to-use polyvinylchloride that provides a snug, extremely flexible insulation ideally suited for encasing cables and components with a wide variation in size. When a 347°F (175°C) temperature is applied FIT-105 tubing shrinks up to 50% in 7 seconds to form a tight fitting, permanent bond. Stock color is black. *Diameter before shrinkage. †Wall thickness.

Cat. No. & Size	Min. I.D.*	Wall †	Net 25′	Net 100′	Net 200′	Net 500′
319-FIT-105-3/64	.046"	.020"	$2.84	$11.34	.....	$56.70
319-FIT-105-1/16	.062"	.020"	3.05	12.08	.....	60.38
319-FIT-105-3/32	.093"	.020"	3.47	13.81	$27.62	.....
319-FIT-105-1/8	.125"	.020"	3.68	14.60	29.19	......
319-FIT-105-3/16	.187"	.025"	4.46	17.85	35.70	.....
319-FIT-105-1/4	.250"	.025"	5.67	22.58	45.15	.....
319-FIT-105-3/8	.375"	.030"	6.25	24.89	49.77	.....
319-FIT-105-1/2	.500"	.030"	7.09	28.30	.....	.....
319-FIT-105-3/4	.775"	.035"	9.45	37.85	.....	.....
319-FIT-105-1	1.000"	.040"	13.65	54.50	.....	.....
319-FIT-105-1-1/2	1.500"	.045"	23.52	93.92	.....	......

FIT-105-MS ASSORTMENTS

Each assortment contains selections of six inch lengths of shrinkable tubing in sizes listed below. Black only. Box wt. 8 oz.

Cat. No.	Sizes	Per Size	Total	Net
319-FIT-105-MS-1	3/64" thru 1/4"	10 pcs.	60 pcs.	$4.84
319-FIT-105-MS-2	3/8" thru 1"	10 pcs.	40 pcs.	9.67
319-FIT-105-MS-3	1-1/2" and 2"	7 pcs.	14 pcs.	8.45

ALL-PURPOSE FIT-221
WITH 50% SHRINKAGE

An all-purpose extruded tubing that is simple to use and provides a tight mechanical bond. Tubing shrinks at 275°F. Available in black, white, red, yellow, blue and clear. Specify quantity and length when ordering.

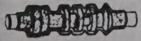
Cat. No. & I.D.	I.D. Shrinks From	6" lgths. Pkg. Qty.	6" lgths. Pkg. Net	4' Lgths. Pkg. Qty.	4' Lgths. Pkg. Net
319-FIT-221-3/64	.046" to .023"	40	$4.12	25	$18.50
319-FIT-221-1/16	.063" to .031"	36	4.12	25	19.43
319-FIT-221-3/32	.093" to .046"	32	4.12	25	22.45
319-FIT-221-1/8	.125" to .062"	28	4.12	25	24.00
319-FIT-221-3/16	.187" to .093"	24	4.12	25	29.95
319-FIT-221-1/4	.250" to .125"	20	4.12	25	36.70
319-FIT-221-3/8	.375" to .187"	16	4.12	25	40.65
319-FIT-221-1/2	.500" to .250"	14	4.12	5	9.25
319-FIT-221-3/4	.750" to .375"	12	4.12	5	12.32
319-FIT-221-1	1.00" to .500"	8	4.12	5	17.25
319-FIT-221-1-1/2	1.50" to .750"	5	4.12	5	27.14

SEMI-RIGID FIT-295
WITH 50% SHRINKAGE

Used to insulate and provide maximum reinforcement and strength at stress points such as wire-end terminals, splices, etc. Tubing shrinks at 275°F. When ordering specify quantity and length desired.

Cat. No. & I.D.	I.D. Shrinks From	6" Lgths. Pkg. Qty.	6" Lgths. Pkg. Net	4' Lgths. Pkg. Qty.	4' Lgths. Pkg. Net
319-FIT-295-3/64	.046" to .023"	40	$4.68	25	$19.40
319-FIT-295-1/16	.063" to .031"	36	4.68	25	20.40
319-FIT-295-3/32	.093" to .045"	32	4.68	25	23.55
319-FIT-295-1/8	.125" to .063"	28	4.68	25	25.20
319-FIT-295-3/16	.187" to .093"	24	4.68	25	30.65
319-FIT-295-1/4	.250" to .125"	20	4.68	25	38.50
319-FIT-295-3/8	.375" to .187"	16	4.68	25	42.65
319-FIT-295-1/2	.500 to .250"	14	4.68	5	9.69

319-FIT-295-MS-1 Assortment, 40 lgths. 3/64" thru 1/2" **$4.68**



POLYOLEFIN FIT-300
SURFACE IRRADIATED
TO MIL-1-23053/4

An easily used encapsulation tubing product. When a temperature of 275°F. (135°C) is applied, the outer wall shrinks while the inner wall melts and flows to eliminate voids and provide moisture-proof encapsulation. Becomes a hard, tough, homogenous molding upon cooling. Good for use on electrical cable junctions and splices; as a mechanical shield for rough edges; and as a vibration shield.

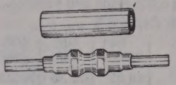
Cat. No. & I.D.	I.D. Shrinks From	6" Lgths. Pkg. Qty.	6" Lgths. Pkg. Net	4' Lgths. Pkg. Qty.	4' Lgths. Pkg. Net
319-FIT-300-1/8	.125" to .023"	14	$4.68	25	$51.00
319-FIT-300-3/16	.187" to .060"	12	4.68	25	62.30
319-FIT-300-1/4	.250" to .080"	10	4.68	25	77.70
319-FIT-300-3/8	.375" to .135"	8	4.68	25	86.60

FIT-300 CONT'D.

Cat. No. & I.D.	I.D. Shrinks From	6"Lgths. Pkg. Qty.	6"Lgths. Pkg. Net	4' Lgths. Pkg. Qty.	4' Lgths. Pkg. Net
319-FIT-300-1/2	.500" to .195"	6	4.68	5	20.40
319-FIT-300-3/4	.750" to .313"	4	4.68	5	31.50
319-FIT-300-3/10*	.300" to .050"	4	4.68	25	177.30

*Heavy walled tubing for use where a large volume of meltable material is required.

HEAT SHRINKABLE TUBING
FIT-400 FEP TEFLON
REQUIRE LESS HEAT



All of the outstanding electrical, chemical and mechanical advantages of Teflon tubing are now available in FEP tubing, without the drawback of high shrinkage temperature requirements. Heat-sensitive components, solid-state devices, solder joints, may now be insulated without damage. Applied as a natural, transparent tubing and requires heat of 200°F–350°F to shrink. †Sizes 24 thru 6 random lengths, min. 3' each. Sizes 5 thru 2 random lengths min. 1' each. Standard package 100'.

Cat. No.	Size AWG	—Inside Dia.— From	—Inside Dia.— To	Wall Thick	Per Ft. † 1-99	Per Ft. † 100-199
319-FIT-400-24	24	.032	.027	.008"	$.24	$.22
319-FIT-400-22	22	.037	.032	.008"	.25	.23
319-FIT-400-20	20	.046	.039	.008"	.26	.25
319-FIT-400-18	18	.061	.049	.008"	.29	.27
319-FIT-400-16	16	.076	.061	.009"	.31	.29
319-FIT-400-14	14	.093	.072	.009"	.34	.32
319-FIT-400-12	12	.116	.089	.009"	.37	.35
319-FIT-400-10	10	.142	.114	.010"	.41	.39
319-FIT-400-9	9	.159	.124	.010"	.56	.52
319-FIT-400-8	8	.181	.143	.010"	.59	.55
319-FIT-400-7	7	.198	.158	.011"	.69	.65
319-FIT-400-6	6	.227	.180	.011"	.73	.68
319-FIT-400-5	5	.249	.198	.011"	.76	.71
319-FIT-400-4	4	.292	.226	.011"	.81	.75
319-FIT-400-3	3	.312	.249	.011"	.95	.87
319-FIT-400-2	2	.367	.280	.012"	1.00	.93

FIT 521 SURFACE IRRADIATED POLYOLEFIN SHRINKS AND MELTS TERMINAL SLEEVES

Flame-retardant polyolefin tubing selectively cross-linked, When heat of 135 C is applied, inner wall melts while outer wall shrinks down. Terminal becomes completely encapsulated and insulated in a hard, tough molding. One size fits most applications. 4-1/2 to 1 shrinkage ratio. Black only. Fungus, solvent. oil and water resistant. Tensile strength, 1500 psi. Low temperature flex, no cracking at -55 C, Min. expanded I.D. as supplied, .315". Max. recovered I.D., .070". Longitudinal shrinkage, 15% max. Flammability, ASTMD-876.

Cat. No.	Length	No. of Lengths	Total Footage	Net Ea.
319-FIT-521	4 ft.	25	100 ft.	$102.75
319-FIT-521	1/2 in.	600	25 ft.	43.68
319-FIT-521	1 in.	300	25 ft.	34.68

FIT-600 NEOPRENE EXTRA FLEXIBLE–RUGGED IRRADIATED HEAT SHRINKABLE TUBING

Meets MIL-R-46846A/1, MIL-1-23053/B/1, AMS-3623. Highly flexible, abrasion resistant heavy wall neoprene tubing. Ideal for fabrication in house short-run cables and harnesses. At applied heat of 175 C, FIT-600 shrinks to approx. half its supplied dia. Longitudinal shrinkage is less than 10% Dielectric strength, 300 volts/mil. Flammability, self-extinguishing in 5 sec.

Cat. No.	Size	Min. I.D.	Wall Thk.	Net 25′	Net 100′
319-600-1/4	1/4"	.250"	.035"	$20.81*	$81.63
319-600-3/8	3/8"	.375"	.040"	24.92	97.67
319-600-1/2	1/2"	.500"	.048"	27.68	108.53
319-600-5/8	5/8"	.625"	.052"	31.16	122.13
319-600-3/4	3/4"	.750"	.057"	34.61	135.74
319-600-7/8	7/8"	.875"	.065"	38.73	151.83
319-600-1	1"	1.000"	.070"	42.21	165.53
319-600-1-1/4	1-1/4"	1.250"	.087"	55.88	219.12
319-600-1-1/2	1-1/2"	1.500"	.095"	65.28	255.99
319-600-1-3/4	1-3/4"	1.750"	.107"	79.82	312.99
319-600-2	2"	2.000"	.110"	92.82	363.99
319-600-3	3"	3.000"	.125"	141.69	280.55*

*Package of 50 feet.

ALPHA WIRE PRODUCTS

20/10 PVC NYLON UNSHIELDED STATION CONTROL CABLE

Heavy-duty, multi-conductor cable with plastic jacket. Each conductor stranded bare copper, .020" polyethylene insulation on 14 and 12 gauge cable; .015" on 16 gauge cable. .010" polyvinylchloride jacket overall. Rated 600 volts. Cable cut to specific lengths, minimum 25 ft. Color Code: Conforms to IPCEA standards either with full color code or surface printed with color name and number.

16 GAUGE, 26/30 BARE COPPER

				Per Feet		
Cat. No.	No. of Cond.	Jacket Thickness	Nom. O.D.	Net 25-99'	100-499'	500-999'
319-4102	2	.045"	.320"	$0.47	$0.30	$0.23
319-4103	3	.045"	.340"	.78	.48	.38
319-4105	5	.045"	.400"	1.26	.80	.63
319-4107	7	.045"	.435"	1.62	1.01	.81
319-4108	8	.045"	.480"	1.80	1.13	.92
319-4110	10	.060"	.580"	2.27	1.41	1.13
319-4112	12	.060"	.590"	2.75	1.71	1.37
319-4114	14	.060"	.605"	2.91	1.82	1.46

14 GAUGE, 19/27 BARE COPPER

319- 4202	2	.045"	.380"	.53	.33	.27
319-4203	3	.045"	.390"	.86	.53	.44
319-4204	4	.045"	.425"	1.04	.65	.51
319-4205	5	.045"	.465"	1.38	.87	.69
319-4206	6	.045"	.520"	1.61	.99	.80
319-4207	7	.045"	.520"	1.80	1.13	.89
319-4208	8	.060"	.580"	2.01	1.26	1.01
319-4209	9	.060"	.635"	2.31	1.44	1.16
319-4210	10	.060"	.690"	2.51	1.58	1.26

15/5 PVC NYLON CONTROL CABLE 600 VOLTS, 90° C

Widely used for all types of control and signal circuits. Bare stranded copper conductor, .015" PVC insulation. .005" nylon jacket over each conductor. Has moisture resistant tape, black PVC jacket overall. Suitable for underground burial. Conductors color coded per IPCEA standards. See color code. Meets UL, ASTM, IPCEA S-61-402. Available cut to customer's length requirement. Minimum order 25 feet per item. * Indicates flat.

AWG NO. 16 (26 x 30)

319-7500	2*	.045"	.295"	$0.60	$0.38	$0.30
319-7501	2	.045"	.310"	.77	.47	.38
319-7502	3	.045"	.310"	.84	.53	.44
319-7503	4	.045"	.335"	1.02	.65	.51
319-7504	5	.045"	.360"	1.38	.87	.69
319-7505	6	.045"	.395"	1.59	.99	.80
319-7506	7	.045"	.395"	1.79	1.11	.89
319-7507	8	.045"	.420"	1.98	1.25	.99
319-7508	9	.045"	.455"	2.28	1.43	1.14
319-7509	10	.045"	.490"	2.48	1.55	1.25
319-7511	12	.045"	.505"	3.02	1.88	1.50
319-7513	14	.060"	.560"	3.20	2.00	1.61
319-7514	15	.060"	.590"	3.53	2.21	1.74
319-7515	16	.060"	.590"	3.89	2.43	1.94
319-7517	18	.060"	.620"	4.29	2.67	2.15
319-7518	19	.060"	.620"	4.56	2.84	2.28
319-7519	20	.060"	.650"	4.79	2.99	2.40
319-7520	21	.060"	.650"	5.04	3.14	2.51
319-7521	22	.060"	.680"	5.27	3.29	2.64
319-7522	23	.060"	.680"	5.40	3.36	2.70
319-7523	24	.060"	.720"	5.51	3.45	2.78

AWG. NO. 14 (19 x 27)

319-7525	2*	.045"	.325"	.71	.47	.36
319-7526	2	.045"	.325"	.80	.50	.39
319-7527	3	.045"	.345"	.95	.60	.48
319-7528	4	.045"	.375"	1.14	.71	.59
319-7529	5	.045"	.405"	1.53	.96	.78
319-7530	6	.045"	.440"	1.76	1.10	.87
319-7531	7	.045"	.440"	1.98	1.25	.99
319-7532	8	.045"	.475"	2.21	1.38	1.11
319-7533	9	.045"	.510"	2.54	1.59	1.28
319-7534	10	.060"	.585"	2.78	1.74	1.38
319-7536	12	.060"	.605"	3.35	2.10	1.68

IPCEA COLOR CODE

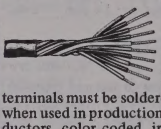
1	Black	9	Green/Black	17	White/Red
2	White	10	Orange/Black	18	Orange/Red
3	Red	11	Blue/Black	19	Blue/Red
4	Green	12	Black/White	20	Red/Green
5	Orange	13	Red/White	21	Orange/Green
6	Blue	14	Green/White	22	Blk/Wht/Red
7	White/Black	15	Blue/White	23	Wht/Blk/Red
8	Red/Black	16	Black/ Red	24	Red/Blk/Wht

MULTI-CONDUCTOR SHIELDED CABLES

MIL-W-16878D

Cabled and twisted stranded tinned copper conductors with .010" color coded polyvinylchloride insulation, braided tinned copper shield with approx. 90% coverage, white polyvinylchloride jacket overall. Temp. rating -55° to +105°C. Voltage rating 600. Resistant to acids, alkalis, oil, flame, moisture, fungus and solvents.

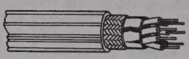
Cat. No.	Conductor No. Size Strand	Nom. O.D.	Net 100'	Net 500'	Net 1000'
319-3210	1 #24 (19x36)	.106"	$5.73	$28.28	$54.15
319-3211	2 #24 (19x36)	.165"	8.01	40.20	78.00
319-3212	3 #24 (19x36)	.173"	10.46	51.45	100.50
319-3220	1 #22 (19x34)	.117"	6.89	30.78	59.72
319-3221	2 #22 (19x34)	.179"	11.92	56.06	110.27
319-3222	3 #22 (19x34)	.192"	15.35	72.89	143.85
319-3230	1 #20 (19x32)	.125"	6.38	38.98	59.55
319-3231	2 #20 (19x32)	.203"	12.00	56.03	109.80
319-3232	3 #20 (19x32)	.213"	15.05	73.67	144.60
319-3240	1 #18 (19x30)	.189"	9.18	42.03	82.22
319-3241	2 #18 (19x30)	.227"	15.17	71.88	141.93
319-3242	3 #18 (19x30)	.239"	19.97	96.20	188.76
319-3245	1 #16 (19x29)	.150"	8.81	43.22	83.55
319-3246	2 #16 (19x29)	.245"	14.45	72.23	142.05
319-3247	3 #16 (19x29)	.258"	19.95	98.57	194.25



IRRADIATED CONDUCTOR CABLE, 600 VOLTS

Miniature shielded cable with both military specifications and UL listings. Ideal for application on crowded circuit boards where terminals must be soldered. Prevents shrinkback, melting or charring when used in production line soldering. Stranded tinned copper conductors, color coded, irradiated PVC (RX-7000) insulation (braided, tinned copper shield) white PVC jacket overall. Nom. jacket thickness, .025". Nom. insul. thickness .010". Unshielded.

319-6621A	1	24	7/32	.90"	$6.26	$29.91	$54.17
319-6622A	2	24	7/32	.129"	9.99	45.38	82.50
319-6623	3	24	7/32	.139"	12.38	59.00	107.25
319-6624A	4	24	7/32	.150"	16.50	78.51	142.73
319-6631	1	22	7/30	.98"	6.66	31.77	57.75
319-6632A	2	22	7/30	.149"	11.15	53.07	96.50
319-6633	3	22	7/30	.155"	13.88	66.09	125.87
319-6634A	4	22	7/30	.168"	19.97	95.06	172.82
319-6641A	1	20	7/28	.105"	7.95	37.82	68.76
319-6642A	2	20	7/28	.163"	11.45	54.56	99.19
310-6643	3	20	7/28	.178"	16.20	77.15	140.25
319-6644A	4	20	7/28	.187"	21.57	102.69	186.72
319-6651A	1	18	7/26	.115"	8.73	41.60	75.62
319-6652A	2	18	7/26	.182"	14.34	68.31	124.20
319-6653	3	18	7/26	.193"	19.08	90.86	165.17



CONTROL & INSTRUMENTATION CABLES

Used for interconnecting cables for electronic equipment, instrumentation and control, telemetry data, remote control of sensitive recording instruments. Working voltage 600 volts.

MIL-W-16878D TYPE B SHIELDED

Conductors are stranded tinned copper, color coded, polyvinylchloride insulation, cabled, mylar wrap. Braided tinned copper shield 90% coverage. Chrome gray polyvinylchloride jacket.

Cat. No.	No. Cond. & Stranding	Nom. O.D.	Net 100'	Net 500'	Net 1000'
319-3302	2 #28 (7x36)	.130"	$15.56	$73.77	$145.46
319-3303	3 #28 (7x36)	.138"	20.57	98.15	194.19
319-3304	4 #28 (7x36)	.150"	24.84	119.61	237.05
319-3306	6 #28 (7x36)	.172"	31.38	153.62	302.97
319-3308	8 #28 (7x36)	.186"	35.58	174.63	345.00
319-3310	10 #28 (7x36)	.214"	44.94	221.21	438.12
319-3312	12 #28 (7x36)	.223"	51.75	250.04	495.89
319-3315	15 #28 (7x36)	.242"	62.22	303.44	602.58
319-3320	20 #28 (7x36)	.272"	77.33	378.21	752.22

18 GAUGE H. D. SHIELDED CONTROL CABLE

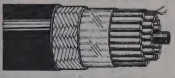
1000 volt, type C conductor. Nom. wall thickness: .016".

319-3405	5	18	19/30	.300"	$63.03	$307.62	$611.06
319-3408	8	18	19/30	.350"	94.91	451.94	821.70
319-3410	10	18	19/30	.405"	111.42	552.65	1092.57
319-3412	12	18	19/30	.430"	151.43	721.02	1310.93
319-3415	15	18	19/30	.470"	151.35	1014.90	1491.77
319-3420	20	18	19/30	.530"	203.82	1014.90	2017.56
319-3430	30	18	19/30	.650"	304.71	1502.33	2983.56

ALPHA WIRE PRODUCTS

COMPUTER COAXIAL CABLE

UL STYLE 2386



Designed for interconnection of data system components. Individual miniature coax cables, grouped together under common overall shield (where indicated) and jacket. Individual miniature coax cables consist of #26 AWG solid silver-plated copper conductor, air-spaced, flame-retardant polyethylene dielectric (.025" polyethylene thread helically wound around conductor; overall .018" polyethylene tube) spiral-wrapped 29 AWG tinned copper drain wire, braided tinned copper shield, overall .016" PVC jacket. Nominal diameter .155". These cables are specifically designed for the most widely used computer systems. Nominal impedance 95 ohms. Attenuation at 400Mc Max. = 10.2db/100ft. Velocity propogation 83%. Voltage 750 max. Operating Temperature +80°C max. *Shielded.

Cat. No.	No. Cables	Jacket Thick	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-2453	20	.085"	.978"	$338.25	$1666.50	$3300.00
319-2454	24	.085"	1.075"	437.25	2161.50	4290.00
319-2456*	24	.080"	1.110"	470.25	2326.50	4620.00

UL STYLE 2343 COMPUTER CABLE

Each conductor stranded tinned copper. Color coded 80°C PVC insulation. Cabled with PVC fillers, .0001" clear mylar wrap. Braided tinned copper shield (85% coverage). Gray PVC jacket. For interconnection of computer modules. Has 6 #18 gauge 16/30 stranded conductors.

Cat. No.	Wall Thick	Jacket Thick	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-2458	.016	.062	.394	$40.43	$199.65	$396.00

UNSHIELDED COMPUTER AND CONTROL CABLE

UL style 1061 conductors, 600 volts. For control and signal application in computers, industrial equipment and instrumentation. Stranded tinned copper conductor, .010" color-coded PVC insulation. Cabled singly or in pairs. Gray vinyl jacket overall. Cable rated at +80 C, 300 volts. Individual conductors rated +105 C, 600 volts.

MULTI-CONDUCTOR CABLES, 24 GAUGE

Nominal O.D. conductor, .045". Nom. jacket thickness, .063". Conductor stranding, 7/32.

Cat. No.	No. of Cond.	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-5200	5	.218"	$37.62	$171.00	$285.00
319-5201	7	.251"	40.68	184.86	308.12
319-5202	12	.301"	56.19	255.36	425.58
319-5203	15	.328"	76.38	347.19	578.66
319-5204	19	.341"	82.79	376.31	627.17
319-5205	27	.394"	110.69	503.12	838.53
319-5206	37	.418"	152.55	693.35	1155.59
319-5207	48	.470"	191.76	871.64	1452.71
319-5208	60	.508"	228.92	1040.54	1734.24

MULTI-CONDUCTOR CABLES, 22 GAUGE

Nominal O.D. conductor, .050". Nom. jacket thickness, .063". Conductor stranding, 7/32.

319-5210	5	.202"	40.71	185.03	308.39
319-5211	7	.272"	43.68	198.54	330.92
319-5212	12	.332"	61.52	279.63	466.05
319-5213	15	.352"	82.55	372.26	625.44
319-5214	19	.372"	90.78	412.68	687.81
319-5215	27	.432"	120.98	549.90	916.50
319-5216	37	.481"	166.95	758.84	1264.73
319-5217	48	.533"	208.56	948.03	1580.04
319-5218	60	.574"	258.75	1176.12	1961.19

PAIRED CABLES, 24 GAUGE

Nominal O.D. conductor, .044". Nom. jacket thickness, .063". Conductor stranding, 7/32.

319-5230	5	.332"	54.21	246.36	410.61
319-5231	7	.352"	62.21	282.75	471.24
319-5232	12	.438"	89.64	407.49	679.14
319-5233	15	.488"	114.57	520.79	867.99
319-5234	19	.507"	130.13	591.48	985.80
319-5235	27	.595"	176.55	802.50	1337.49
319-5236	37	.665"	236.70	1075.89	1793.15
319-5237	48	.747"	295.47	1343.04	2238.39
319-5238	60	.819"	377.34	1715.18	2858.63

PAIRED CABLES, 22 GAUGE

Nominal O.D. conductor, .050". Nom. jacket thickness, .063". Conductor stranding, 7/30.

319-5240	5	.368"	59.46	270.27	450.45
319-5241	7	.393"	68.84	312.89	521.49
319-5242	12	.475"	191.09	459.47	765.77
319-5243	15	.551"	132.87	603.95	1006.59
319-5244	19	.563"	149.34	678.80	1131.33
319-5245	27	.604"	198.05	900.21	1500.35
319-5246	37	.755"	265.97	1208.94	2014.91
319-5247	48	.856"	343.73	1562.37	2603.96
319-5248	60	.984"	425.37	1933.47	3222.45

SHIELDED COMPUTER AND CONTROL CABLE

UL style 1061 conductors, 600 volts, 80 C. Used for control and signal application in computers, industrial equipment and instrumentation. Stranded tinned copper conductor, .010" color-coded PVC insulation. Braided tinned copper shield. Cabled singly or in pairs; gray vinyl jacket overall. Cable rated at 80 C, 300 volts. Individual conductors rated 105 C, 600 volts.

MULTI-CONDUCTOR CABLES, 24 GAUGE

Nominal O.D. conductor, .045". Nom. jacket theckness, .063". Conductor stranding, 7/32.

Cat. No.	No. of Cond.	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-5300	5	.247"	$45.27	$205.82	$343.04
319-5301	7	.277"	49.85	226.61	377.69
319-5302	12	.328"	67.47	306.66	511.10
319-5303	15	.353"	88.74	403.32	672.21
319-5304	19	.367"	96.29	437.63	729.39
319-5305	27	.418"	126.69	575.88	959.81
319-5306	37	.447"	172.22	782.75	1304.58
319-5307	48	.497"	215.66	980.25	1633.76
319-5308	60	.538"	255.23	1160.09	1933.47

MULTI-CONDUCTOR CABLES, 22 GAUGE

Nominal O.D. conductor, .050". Nom. jacket thickness, .063". Conductor stranding, 7/30.

319-5310	5	.287"	49.85	226.61	377.69
319-5311	7	.298"	53.97	245.33	408.87
319-5312	12	.357"	74.10	336.80	561.33
319-5313	15	.382"	96.51	438.68	731.12
319-5314	19	.397"	105.65	480.26	800.42
319-5315	27	.458"	140.64	639.30	1065.50
319-5316	37	.513"	191.19	869.03	1448.37
319-5317	48	.563"	236.24	1073.81	1789.68
319-5318	60	.603"	285.41	1297.29	2162.16

PAIRED CABLES, 24 GAUGE

Nominal O.D. conductor, .058". Nom. jacket thickness, .063". Conductor stranding, 7/32.

319-5330	5	.357"	66.78	303.54	505.89
319-5331	7	.378"	76.38	347.19	578.66
319-5332	12	.378"	111.60	507.27	845.46
319-5333	15	.513"	138.81	630.98	1051.64
319-5334	19	.533"	156.42	711.02	1185.03
319-5335	27	.622"	208.11	945.95	1576.58
319-5336	37	.693"	272.37	1238.04	2063.42
319-5337	48	.778"	336.41	1529.10	2548.52
319-5338	60	.847"	422.61	1920.99	2548.52

PAIRED CABLES, 22 GAUGE

Nominal O.D. conductor, .050". Nom. jacket thickness, .063". Conductor stranding, 7/30.

319-5340	5	.392"	73.88	335.76	559.61
319-5341	7	.418"	84.62	383.76	641.03
319-5342	12	.497"	126.24	573.81	956.34
319-5343	15	.578"	153.56	697.95	1221.42
319-5344	19	.584"	179.52	816.02	1360.85
319-5345	27	.672"	233.73	1063.38	1770.62
319-5346	37	.784"	307.83	1399.17	2331.95
319-5347	48	.883"	391.28	1778.58	2964.32
319-5348	60	.960"	482.76	2194.38	3657.32

HI-FI & STEREO CABLES

For use in high fidelity music systems where small gauge, low current conductors are required. Conductors are stranded tinned copper with polyvinylchloride insulation, color coded and twisted. Types 1105 and 1107 have been especially designed for limpness so as not to impede the movement of a phono arm when tracking.

UNSHIELDED

Cat. No.	No. Cond.	AWG & Stranding	Nom. O.D.	Net 100′	Net 1000′
319-1115	2	30 (7x38)	.065"	$5.43	$41.13
319-1116	3	30 (7x38)	.070"	7.31	59.70

STEREO (UNSHIELDED)

319-1101	3	32 (7x40)	.053"	9.00	77.87
319-1102	4	32 (7x40)	.061"	12.11	109.19

STEREO (SHIELDED)

319-1105	2	32 (7x40)	.055"	10.67	94.76
319-1107	4	32 (7x40)	.068"	15.24	104.07

ALPHA WIRE PRODUCTS

AUDIO AND CONTROL CABLES

UNSHIELDED. HEAVY DUTY

For remote control of automatic equipment in sub-stations, telemetering, voltage pressure and motor control, signal transmission, etc. Bare stranded conductors are color coded, cabled with fillers where necessary, and enclosed in an overall noeprene jacket impervious to most enviromental conditions.

16 GA. (65x34)

Stranded bare copper. .0312" rubber insulation. .078" black neoprene jacket. 600 volts working.

Cat. No.	No. Cond.	Nom. O.D.	Net Ft.
319-4605	5	.520"	**$1.52**
319-4606	6	.540"	**1.76**
319-4607	7	.540"	**2.04**
319-4608	8	.580"	**2.43**
319-4610	10	.720"	**3.09**

18 GA. (41x34)

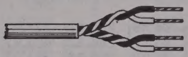
Stranded bare copper. .0312" rubber insulation. .078" black neoprene jacket. 600 volts working.

Cat. No.	No. Cond.	Nom. O.D.	Net Ft.
319-4505	5	.485"	**$1.35**
319-4506	6	.510"	**1.58**
319-4508	8	.560"	**2.13**
319-4509	9	.595"	**2.57**
319-4510	10	.620"	**2.87**

14 GA. (41x30)

Stranded bare copper. .0468" rubber insulation. .078" black neoprene jacket. 600 volts working.

319-4705	5	.675"	**$2.21**
319-4706	6	.705"	**2.73**
319-4708	8	.760"	**3.50**
319-4709	9	.810"	**4.25**
319-4710	10	.870"	**4.46**



UNSHIELDED INTERCOM CABLES

PAIRED CONDUCTORS

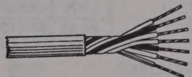
For balanced intercom systems, annuciators, telephones, call systems, signal systems, multiple speakers, alarm systems, etc. Each conductor is tinned copper, color coded polyvinylchloride insulaed, conductors twisted into pairs, gray polyvinylchloride jacket overall. Operating voltage 200. Temp. range -20°C to +60°C.

Cat. No.	No. Pairs & Stranding	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-1316	1 #22 (7x30)	.150"	**$4.68**	**$18.90**	**$35.75**
319-1317	2 #22 (7x30)	.225"	**5.76**	**24.83**	**47.25**
319-1318	3 #22 (7x30)	.238"	**8.34**	**36.06**	**70.20**
319-1319	4 #22 (7x30)	.260"	**10.43**	**46.13**	**89.85**
319-1320	5 #22 (7x30)	.290"	**12.83**	**59.42**	**116.91**
319-1322	6 #22 (7x30)	.320"	**12.98**	**60.90**	**119.40**
319-1323	9 #22 (7x30)	.370"	**19.80**	**93.83**	**185.25**
319-1324	11 #22 (7x30)	.400"	**28.55**	**138.66**	**275.18**
319-1327	15 #22 (7x30)	.450"	**32.83**	**157.38**	**311.55**
319-1327/19	19 #22 (7x30)	.480"	**40.19**	**197.73**	**392.25**
319-1329	27 #22 (7x30)	.570"	**61.59**	**303.15**	**601.50**
319-1329/41	41 #22 (7x30)	.708"	**173.97**	**864.99**	**1728.05**

SHIELDED AUDIO AND DATA CABLE

Tinned-copper conductors with color-coded polyethylene insulation, twisted into pairs. Tinned-copper 22-gauge drain wire with Mylar® supported aluminum foil shield, aluminum facing inward. Chrome PVC jacket overall. Capacitance: Between conductors of a pair, 25 pF/ft; conductor to shield, 54 pF/ft. For audio. RF and pulse applications requiring superior circuit isolation. 22 Gauge.

Cat. No.	Conductor Pairs	Conductor Strand	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-6000	3	Solid	.235"	**$27.86**	**$57.00**	**$111.45**
319-6002	6	Solid	.318"	**24.80**	**116.81**	**232.80**
319-6004	9	Solid	.371"	**34.05**	**166.65**	**330.90**
319-6006	11	Solid	.414"	**40.74**	**197.70**	**393.00**
319-6008	15	Solid	.485"	**56.36**	**270.15**	**537.90**
319-6010	3	7/30	.252"	**13.68**	**66.00**	**129.60**
319-6012	6	7/30	.342"	**27.86**	**137.25**	**272.10**
319-6014	9	7/30	.410"	**42.30**	**200.70**	**399.00**
319-6016	11	7/30	.457"	**49.40**	**238.16**	**473.10**
319-6018	15	7/30	.523"	**65.13**	**315.26**	**627.30**
319-6020	19	7/30	.570"	**87.95**	**419.73**	**836.25**
319-6022	27	7/30	.687"	**126.96**	**608.45**	**1210.50**



UNSHIELDED AUDIO CABLES

For unbalanced intercom systems, low voltage relay control cable, P.A. systems, electronic computer cable, interconnecting cables, remote control, etc. Each conductor is stranded tinned copper, color coded polyvinylchloride insulation, conductors twisted, gray polyvinylchloride jacket overall. Suitable for outdoor use.

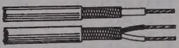
CONTINUED IN NEXT COLUMN

Cat. No.	No. Cond. & Stranding	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-1172	2 #22 (7x30)	.150"	**$3.66**	**$13.55**	**$25.50**
319-1173	3 #22 (7x30)	.158"	**4.43**	**16.88**	**31.35**
319-1174	4 #22 (7x30)	.172"	**5.16**	**22.43**	**42.60**
319-1175	5 #22 (7x30)	.186"	**6.33**	**27.03**	**51.00**
319-1176	6 #22 (7x30)	.200"	**10.83**	**47.90**	**95.82**
319-1177	7 #22 (7x30)	.200"	**7.68**	**33.54**	**64.50**
319-1178	8 #22 (7x30)	.217"	**12.83**	**58.05**	**116.00**
319-1179	9 #22 (7x30)	.239"	**14.21**	**63.50**	**127.01**
319-1180	10#22 (7x30)	.260"	**11.52**	**52.80**	**105.60**
319-1181	12#22 (7x30)	.268"	**12.98**	**61.28**	**120.15**
319-1181/15	15#22 (7x30)	.310"	**21.72**	**99.09**	**195.00**
319-1181/20	20#22 (7x30)	.343"	**24.89**	**119.70**	**239.40**
319-1181/25	25#22 (7x30)	.380"	**33.84**	**156.30**	**312.60**
319-1181/30	30#22 (7x30)	.402"	**71.69**	**351.75**	**703.52**
319-1181/40	40#22 (7x30)	.459"	**108.48**	**536.70**	**1073.40**
319-1181/50	50#22 (7x30)	.501"	**134.78**	**666.80**	**1333.59**
319-1181/60	60#22 (7x30)	.542"	**170.30**	**842.79**	**1685.57**

UNSHIELDED AUDIO CABLES

Tinned copper conductors, color coded polyvinylchloride insulation, conductors twisted, gray polyvinylchloride jacket overall.

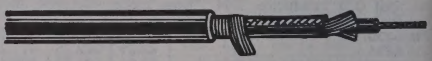
Cat. No.	No. Cond. & Stranding	Nom. O.D.	Net 100′	Net 500′	Net 1000′
319-1893	2 #22 (7x30)	.150"	**$4.43**	**$15.27**	**$30.51**
319-1894	3 #22 (7x30)	.158"	**4.91**	**19.61**	**39.20**
319-1894/4	4 #22 (7x30)	.170"	**6.53**	**25.91**	**51.81**
319-1895	2 #20 (7x28)	.190"	**4.07**	**16.04**	**30.00**
319-1896	3 #20 (7x28)	.200"	**10.92**	**48.60**	**94.08**
319-1896/4	4 #20 (7x28)	.220"	**12.66**	**57.95**	**136.79**
319-1897	2 #18 (16x30)	.210"	**5.43**	**23.48**	**44.70**
319-1898	3 #18 (16x30)	.235"	**13.59**	**62.10**	**118.34**
319-1898/4	4 #18 (16x30)	.245"	**9.39**	**42.98**	**83.55**
319-1898/6	6 #18 (16x30)	.315"	**26.94**	**128.48**	**255.56**
319-1898/8	8 #18 (16x30)	.340"	**35.69**	**171.95**	**341.73**
319-1899	2 #16 (10x29)	.265"	**7.20**	**31.67**	**60.60**
319-1891	2 #14 (19x27)	.330"	**10.83**	**49.35**	**96.30**
319-1891/3	3 #14 (19x27)	.350"	**26.62**	**127.01**	**252.87**



SHIELDED MICROPHONE CABLES

Conductors are stranded tinned copper, white polyethylene insulation. Two conductor types are cabled with fillers and textile wrapped. Shielding is tinned copper †spiral wrapped, or ‡braided. Overall jacket is gray polyvinylchloride. *3 #34 tinned copper and 4 #34 tinned copperweld conductors. § Between one conductor and remaining conductors connected to shield. Two conductor types are for use with low impedance microphones.

Cat. No.	Cond. & AWG	Nom. O.D.	Mmfd Cap. §	Net 100′	Net 500′	Net 1000′
319-1702	1 #26*†	.110"	38	**$6.95**	**$28.67**	**$54.89**
319-1703	1 #24‡	.145"	35	**6.00**	**26.25**	**52.61**
319-1704	1 #24‡	.190"	23	**6.75**	**29.24**	**56.55**
319-1705	1 #24†	.110"	45	**7.89**	**33.03**	**63.41**
319-1706	1 #20‡	.175"	36	**12.09**	**54.14**	**106.05**
319-1709	2 #24†	.190"	38	**11.85**	**53.03**	**103.65**
319-1710	2 #22‡	.230"	31	**9.57**	**43.43**	**84.45**
319-1712	2 #20‡	.245"	45	**16.16**	**79.10**	**155.81**



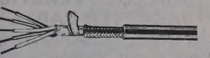
RUBBER AND NEOPRENE JACKETS

Each conductor stranded tinned copper with color-coded rubber insulation, cotton wrap; braided tinned copper shield, copper wrap and tough black rubber or neoprene jacket overall. Rubber jacket type suited for standard-duty indoor use; neoprene type for heavy duty outdoor use and direct burial. Temp., -20 C to +60 C. Nos. 1248-1449: for high impedance mike, studio and audio use. Nos. 1250-1450/16: For low impedance mike, circuit control, power and audio interconnection. *Mylar® wrap under tinned copper shield. †Neoprene jacket; all others rubber.

319-1248	1	#26*	.190"	97	**$17.67**	**$85.23**	**$166.16**
319-1249	1	#20	.230"	60	**17.99**	**86.84**	**169.40**
319-1249/18	1	#18	.240"	69	**25.07**	**120.98**	**239.18**
319-1449	1	#18†	.240"	69	**24.90**	**120.42**	**238.76**
319-1250	2	#20	.270"	68	**14.66**	**67.67**	**132.90**
319-1250/18	2	#18	.295"	78	**28.52**	**139.40**	**274.77**
319-1450	2	#18†	.295"	78	**32.72**	**160.53**	**316.97**
319-1450/16	2	#16†	.335"	82	**62.99**	**290.22**	**568.07**

ALPHA WIRE PRODUCTS

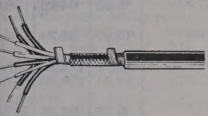
SHIELDED G P PLASTIC JACKET



Each conductor, stranded tinned copper with color-coded polyethylene insulation .015" thick, cabled vith fillers where necessary; fayon wrap; braided, tinned copper hield; chrome gray polyvinylchloride jacket overall. Rated 600 olts. Temp., -20 C to +80 C. Wire size #20, Strand 26/34.

Cat. No.	No. Cond.	Nom. Th.	Jacket O.D.	Net 100′	Net 500′	Net 1000′
19-1712	2	.030"	.245"	$16.16	$79.10	$155.81
19-1713	3	.035"	.250"	13.50	61.89	121.20
19-1715	4	.035"	.260"	14.63	67.88	133.35
19-1716	5	.035"	.275"	16.91	79.28	156.15
19-1717	6	.035"	.300"	33.99	164.81	327.68
19-1719	8	.035"	.330"	45.05	223.47	444.63
19-1721	10	.035"	.375"	55.89	274.37	546.96
19-1723	12	.035"	.380"	87.60	475.32	864.50
19-1726	15	.035"	.410"	135.06	671.54	1340.84
19-1728	20	.035"	.455"	176.03	874.34	1746.63

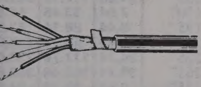
SHIELDED, RUBBER INSULATED, RUBBER JACKET



Each conductor stranded, tinned copper with color-coded rubber insulation .020" thick, cabled with fillers where necessary; coton wrap; braided tinned copper shield; cotton wrap; tough black ubber jacket overall. Extra flexible for control, video and audio ses. Temp., -20 C to +60 C. Wire size #20, Strand 26/34. 1250/18 vire size #18, Strand 41/34.

19-1250/18	2	.035"	.295"	$28.52	$139.40	$274.77
19-1250	2	.035"	.270"	14.66	67.67	132.90
19-1251	3	.035"	.285"	16.79	78.18	153.90
19-1252	4	.035"	.305"	19.64	87.51	171.75
19-1253	5	.035"	.330"	23.34	110.70	221.40
19-1254	6	.035"	.345"	28.61	136.65	273.30
19-1255	7	.035"	.355"	30.90	148.50	297.00
19-1255/8	8	.035"	.385"	35.16	166.80	333.60
19-1255/10	10	.035"	.440"	93.89	448.25	875.13
19-1255/12	12	.065"	.525"	136.71	661.19	1299.87
19-1255/15	15	.065"	.595"	177.06	862.80	1702.70
19-1255/20	20	.065"	.660"	219.65	1075.77	2129.12

UNSHIELDED, RUBBER INSULATED, RUBBER JACKET



Each conductor stranded, tinned copper with color-coded rubber inulation .020" thick, cabled with fillers where necessary; cotton rap; tough black rubber jacket overall. Temp., -20 C to +60 C. Vire size #20, Strand 26/34.

19-1244	2	.035"	.240"	$17.04	$81.14	$160.32
19-1245	3	.035"	.255"	18.66	90.23	176.37
19-1246	4	.035"	.275"	21.00	102.23	200.30
19-1247	5	.035"	.300"	28.17	132.60	261.03
19-1247/6	6	.035"	.315"	34.26	163.14	322.22
19-1247/7	7	.035"	.325"	41.52	197.72	376.70
19-1247/8	8	.035"	.360"	43.17	207.62	411.11
19-1247/10	10	.035"	.410"	70.62	328.04	643.70
19-1247/12	12	.035"	.435"	98.07	469.02	916.74
19-1247/15	15	.035"	.505"	137.54	666.21	1311.06
19-1247/20	20	.035"	.570"	185.46	884.70	1748.12

SHIELDED, HD NEOPRENE JACKET

ach conductor stranded tinned copper; color-coded rubber insution (.020" th., 18 ga. cables; .025" th., 16 ga. cables), cabled ith fillers where necessary; cotton wrap; braided tinned copper ield; cotton wrap and black neoprene jacket overall. Temp., -20 C +60 C. Strand (18ga.): 41/34, (16 ga.): 65/34.

#18 GAUGE CABLE

19-1450	2	.035"	.295"	$32.72	$160.53	$316.97
19-1451	3	.035"	.305"	60.53	277.86	543.36
19-1452	4	.035"	.330"	74.10	345.78	679.20
19-1454	6	.035"	.370"	112.73	536.54	1059.60
19-1456	8	.035"	.420"	148.29	714.29	1415.03
19-1458	10	.035"	.480"	181.59	880.74	1747.80
19-1459	12	.035"	.555"	249.05	1197.71	2372.75
19-1459/15	15	.035"	.640"	310.22	1505.58	2988.53
19-1459/20	20	.035"	.730"	348.68	1698.03	3373.41

#16 GAUGE CABLE

19-1450/16	2	.035"	.335"	62.99	290.22	568.07
19-1451/16	3	.035"	.355"	75.75	354.03	695.67
19-1452/16	4	.035"	.385"	86.25	406.50	800.64
19-1454/16	6	.035"	.445"	146.46	699.38	1376.19
19-1456/16	8	.035"	.510"	175.55	846.02	1687.56

SHIELDED TEFLON CABLES

Each conductor stranded silver-plated copper, Type E, .010" extruded Teflon insulation per MIL-W-16878D. Rated 600 volts. When shielded, a closely woven silver-plated copper shield is braided over the conductor(s). When braided, a "Teflon" impregnated fiberglass yarn is woven over the shield. Where indicated "fused", a sintered, wrapped white Teflon tape jacket is fused over the shield. Temp., -65 C to +200 C.

SINGLE CONDUCTOR

Cat. No.	Conductor Size	Conductor Strand	Outer Cover	Net 100′	Net 1000′
319-2809	24	19/36	Shield	$26.03	$202.94
319-2811	24	19/36	Braid	31.62	255.35
319-2821	24	19/36	Fused	29.69	247.50
319-2812	22	19/34	Shield	26.03	202.58
319-2814	22	19/34	Braid	32.82	267.53
319-2824	22	19/34	Fused	30.87	258.00
319-2815	20	19/32	Shield	29.19	222.86
319-2817	20	19/32	Braid	35.12	291.54
319-2827	20	19/32	Fused	33.51	284.70
319-2818	18	19/30	Shield	39.21	331.82
319-2819	18	19/30	Braid	47.42	415.02
319-2829	18	19/30	Fused	42.32	373.20
319-2807	16	19/29	Shield	39.03	329.99
319-2826	16	19/29	Fused	45.63	408.00

TWO CONDUCTOR

319-2809/2	24	19/36	Shield	44.03	384.09
319-2811/2	24	19/36	Braid	43.82	377.21
319-2821/2	24	19/36	Fused	41.78	368.40
319-2812/2	22	19/34	Shield	40.65	347.00
319-2814/2	22	19/34	Braid	47.63	416.43
319-2824/2	22	19/34	Fused	45.78	408.00
319-2815/2	20	19/32	Shield	45.84	397.67
319-2817/2	20	19/32	Braid	53.24	474.14
319-2827/2	20	19/32	Fused	50.75	457.50
319-2818/2	18	19/30	Shield	65.04	589.49
319-2819/2	18	19/30	Braid	71.82	658.74
319-2829/2	18	19/30	Fused	63.23	585.00
319-2807/2	16	19/29	Shield	81.21	329.99
319-2826/2	16	18/29	Fused	81.14	760.50

SHIELDED TYPE E TEFLON INSULATED

Each conductor stranded silver-plated copper. Type E extruded TFE insulation color coded, cabled, braided silver-plated copper shield 90% coverage, extruded white Teflon jacket overall. Temperature range -65°C to +200°C. Voltage rating 600 volts.

Cat. No.	No. Cond.	AWG & Stranding	Nom. O.D.	Mmfd. Cap.*	Net 100′	Net 1000′
319-2831	1	24 (19x36)	.085"	45	$32.76	$273.42
319-2831/2	2	24 (19x36)	.130"	35	45.48	399.48
319-2831/3	3	24 (19x36)	.135"	35	62.58	571.40
319-2834	1	22 (19x34)	.091"	55	32.76	273.06
319-2834/2	2	22 (19x34)	.150"	45	48.39	429.15
319-2834/3	3	22 (19x34)	.158"	35	70.77	653.79
319-2837	1	20 (19x32)	.100"	55	35.66	301.80
319-2837/2	2	20 (19x32)	.168"	95	53.48	480.81
319-2837/3	3	20 (19x32)	.178"	85	77.87	724.02

*Between shield and each cond. Cond. colors white, black, red.

TEFLON DIELECTRIC

MINIATURE RG-U COAC CABLES

For RF applications. Conductors are silver plated copperweld. Jacket: *extruded FEP; † fused TFE tape.

Cat. No.	RG Type	Ohms Imp.	Nom. O.D.	Jacket	Net 100′	Net 500′	Net 1000′
319-9178B	178B/U	50	.075"	FEP*	$16.50	$70.13	$140.25
319-9179B	179B/U	75	.105"	FEP*	29.70	122.52	245.03
319-9180B	180B/U	93	.145"	FEP*	39.60	179.85	358.88
319-9187A	187A/U	75	.110"	TFE†	27.23	123.75	247.17
319-9188A	188A/U	50	.110"	TFE†	27.23	119.63	239.25
319-9195A	195A/U	95	.155"	TFE†	54.45	259.05	518.10
319-9196A	196A/U	50	.080"	TFE†	21.45	87.45	174.90

SHIELDED COMMUNICATION COIL CORD

For use as microphone cords in mobile radio, CB units, etc. *One conductor with individual cadmium copper shield. Tinned copper conductors with rubber insulation and neoprene jacket overall.

Cat. No.	AWG & Stranding	Length Retr.	Length Extd.	Rated V.	Cord O.D.	Net Each
319-692-2	1 #23 (21x36) 1 #24 (41x40)*	2'	12'	100	.240"	$11.64
319-692-4	1 #23 (21x36) 1 #24 (41x40)*	4'	25'	100	.240	21.26

ALPHA WIRE PRODUCTS

TELEMETERING AND SUPERVISORY SHIELDED CONTROL CABLE

Used for remote control of rocket recording data and test-firing control, transmission of signals which telemeter temperature, voltage pressure, etc., control of multiple circuits, measuring devices, quality control equipment, radar antenna. For aerial, duct and conduit installations. Double jacketed types have higher dielectric strength, suited for direct burial installations. Each conductor bare solid copper. High molecular weight polyethylene insulation. Color coded, twisted into pairs, cabled with a non-hygroscopic binder tape .008" aluminum shield, black polyethylene jacket overall. Voltage rating, 300 V. Double jacketed types have additional inner black polyethylene jacket over binder, and .005" copper shield. Cut to specification, minimum, 25 ft. Orders non-cancellable. Color Code: fully color coded in accordance with REA standards.

22 AWG SOLID

Nominal insulation thickness, .015".

Cat. No.	No. of Pairs	Jacket Thick.	Nom. O.D.	25'-99'	100'-499'	500'-999'	1M'-Up
319-3706	6	.060"	.51"	$1.05	$0.72	$0.65	$0.59
319-3712	12	.060"	.62"	1.46	1.04	.92	.83
319-3718	18	.060"	.71"	1.71	1.31	1.14	1.02
319-3725	25	.060"	.79"	2.24	1.58	1.37	1.29
319-3750	50	.070"	1.05"	3.44	2.54	2.31	2.07

DOUBLE JACKET HD, 22 AWG SOLID

Nominal insulation thickness, .015". Nominal inner jacket, .047".

319-3906	6	.060"	.56"	$1.38	$1.01	$0.92	$0.83
319-3912	12	.060"	.67"	1.91	1.35	1.25	1.13
319-3918	18	.060"	.76"	2.31	1.64	1.49	1.35
319-3925	25	.060"	.84"	2.64	1.91	1.74	1.58
319-3950	50	.070"	1.10"	4.29	3.03	2.76	2.51

MICRO-MINIATURE COAX CABLE

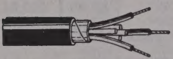
COMPUTER, INSTRUMENTATION, ULTRA-COMPACT WIRING

Center conductor, solid silver-plated copper with 40 micro-inch minimum plating. Cellular polypropylene or FEP Teflon dielectric. Aluminized Mylar shield, 30AWG, solid silver-plated copper drain wire—parallel to center conductor. Flame-retardant Vylex (laminated Mylar) blue-colored jacket overall. Extremely small and flexible with high cut-through resistance. Provides uniform characteristic impedance, low losses and low propogation delays. Crosstalk kept to minimum. Computer wiring, high density packaging, point-to-point wiring, micro miniature systems.

Cat. No.	Imp. Ohms	Cond. AWG	Dielectric Material	Nom. O.D.	Net 100'
319-9500	100	32	Cellular Polypropolene	.080	$30.95
319-9475	75	30	Cellular Polypropolene	.065	30.95
319-9450	50	32	FEP	.40	30.95

MEDICAL SAFETY CABLE

LOW LEAKAGE UL TYPE SJT 300 VOLTS



A specially designed low leakage power cable that greatly reduces danger of electrical shock in medical and dental applications. Each conductor stranded and annealed copper. Insulation color coded FEP Teflon. Low dielectric constant polyethylene fillers provide wider conductor spacing. Paper tape wrap over core with red PVC jacket overall. Maximum leakage, 10 ft. length at 120V is 6 microamperes to green 16 microamperes through jacket. 3 conductors black, white, green. Nominal thickness of insulation .031" and jacket .050".

Cat. No.	Cond. AWG	Nom. O.D.	Net 100'	Net 250'	Net 500'	Net 1000'
319-1980	18	.430"	$159.15	$397.13	$791.25	$1578.75
319-1982	16	.475"	181.88	454.32	905.63	1807.50

FLAT BRAID

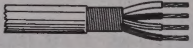
Woven of tinned copper strands, then rolled flat. Used for bonding in vehicles, aircraft, etc. Extremely flexible. High current capacity.

Cat. No.	Flat Width	Thick-ness	Max. Amps	Net 100'	Net 500'	Net 1000'
319-1222	1/32"	.015"	4.0	$6.74	$29.03	$55.76
319-1224	3/32"	.020"	11.0	7.92	36.02	69.86
319-1229	1/8"	.020"	16.0	8.93	40.11	78.05
319-1230	3/16"	.020"	25.0	9.74	44.58	86.88
319-1231	1/4"	.030"	32.0	13.19	61.76	121.25
319-1232	3/8"	.030"	46.0	21.11	102.15	199.94
319-1233/2	1/2"	.030"	53.0	26.75	131.06	257.78
319-1233	5/8"	.030"	53.0	28.31	138.33	272.34
319-1234	3/4"	.040"	85.0	64.85	317.72	626.60
319-1235	1"	.045"	85.0	69.41	340.46	672.18

SHIELDED PLASTIC JACKETED CABLE

A shielded, flexible cable for sound systems, amateur radio transmitters, shielded power or electronic circuits, wherever an economical shielded cable is required. Stranded tinned copper conductors, with color coded polyvinylchloride insulation, conductors twisted, with braided tinned copper shield, gray polyvinylchloride jacket overall. 75% shield coverage. Temp. -20ºC. to +60ºC. *With #22 AWG tinned copper ground wire under braided shield. Working voltage #22 thru #16 350 volts, #14 & #12 450 volts.

Cat. No.	AWG & Stranding	Nom. O.D.	Net 100'	Net 500'	Net 1000'
319-1736	2 #22 (7x30)	.197"	$8.06	$34.92	$67.76
319-1737	3 #22 (7x30)	.207"	7.44	32.43	61.65
319-1738	4 #22 (7x30)	.223"	5.68	73.64	145.26
319-1741	2 #20 (7x28)	.213"	11.43	51.98	102.06
319-1742	3 #20 (7x28)	.224"	13.35	65.52	121.71
319-1746	2 #18 (7x26)	.250"	13.95	64.80	127.59
319-1747	3 #18 (7x26)	.273"	19.83	94.25	185.46
319-1748	2 #16 (19x29)	.290"	19.67	93.21	184.52
319-1750	2 #14 (19x27)	.355"	24.78	118.77	235.62
319-1751	3 #14 (19x27)	.375"	37.34	186.50	361.23
319-1760	2 #12 (19x25)	.423"	39.50	192.39	382.80
319-1775*	2 #22 solid	.190"	7.40	30.00	60.00



SHIELDED PLASTIC JACKETED CABLES

Conductors are stranded tinned copper, color coded polyvinylchloride insulation, conductors twisted, spiral wrapped tinned copper shield, gray polyvinylchloride jacket overall. Provides 85% shielded coverage for audio and RF frequencies. Working voltage 350.

319-2255	2 #22 solid	.170"	$4.89	$22.14	$41.55
319-2254/1	1 #22 7/30	.115"	5.97	25.38	50.78
319-2254	2 #22 7/30	.175"	5.15	24.09	45.45
319-2254/3	3 #22 7/30	.190"	11.40	50.81	99.18
319-2254/4	4 #22 7/30	.200"	18.15	84.68	167.90
319-2254/6	6 #22 7/30	.235"	24.65	117.15	232.83
319-2256/1	1 #20 10/30	.130"	7.94	33.45	64.50
319-2256	2 #20 10/30	.195"	6.44	28.14	53.55
319-2256/3	3 #20 10/30	.210"	12.89	58.22	114.02
319-2256/4	4 #20 10/30	.225"	24.74	117.74	233.03
319-2256/6	6 #20 10/30	.265"	31.71	152.48	302.63
319-2258/1	1 #18 16/30	.135"	8.91	38.39	74.36
319-2258	2 #18 16/30	.230"	8.19	36.53	70.65
319-2258/3	3 #18 16/30	.235"	10.02	45.83	89.40
319-2258/4	4 #18 16/30	.245"	25.76	122.72	242.85
319-2260	2 #16 26/30	.240"	10.28	46.95	91.50
319-2260/3	3 #16 26/30	.245"	28.28	133.76	267.69
319-2265	2 #14 41/30	.285"	27.81	132.56	262.68
319-2265/3	3 #14 41/30	.290"	30.66	146.03	278.15
319-2268	2 #12 65/30	.325"	30.14	143.48	273.29
319-2268/3	3 #12 65/30	.330"	42.66	203.12	386.87

ALUMINUM FOIL SHIELDED PLASTIC CABLE

Each conductor stranded tinned copper, color coded polyethylene insulation, conductors cabled, wrapped mylar supported aluminum foil shield, 100% coverage with drain wire laid parallel, aluminum foil facing outward to provide maximum ground, gray pvc jacket overall. Operating temperature: -20ºC to +60ºC. Operating voltage: 400 volts. Lightweight reduces cable diameter, and provides 100% shield coverage.

Cat. No.	AWG & Stranding	Nom. O.D.	Net 100'	Net 500'	Net 1000'
319-2402	2 #22 (7x30)	.195"	$5.06	$20.27	$37.50
319-2403	3 #22 (7x30)	.210"	5.61	24.83	47.25
319-2404	4 #22 (7x30)	.225"	12.24	56.94	113.88
319-2412	2 #20 (7x28)	.210"	5.61	24.83	47.25
319-2413	3 #20 (7x28)	.225"	6.90	31.05	59.70
319-2414	4 #20 (7x28)	.240"	12.71	58.59	115.19
319-2422	2 #18 (16x30)	.230"	6.57	29.63	56.85
319-2423	3 #18 (16x30)	.245"	8.36	39.32	76.05
319-2424	4 #18 (16x30)	.265"	14.99	69.84	137.63
319-2432	2 #16 (19x29)	.274"	8.58	43.28	84.00
319-2433	3 #16 (19x29)	.300"	12.87	59.40	117.15

ALPHA WIRE PRODUCTS

BUS BAR TINNED COPPER

Solid wire for winding of coils, antennas, point to point wiring, bus bar, component leads, ground wire. Pure electrolytic soft, drawn, solid copper annealed and tinned for quick soldering, MIL-W-3861 Type S, QQ-W-343 Type S and ASTM-B-33 specifications.

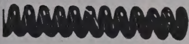
Cat. No.	Cond. Size	Circ. Mil Area	Nom. O.D.	Net 100′	Net 1000′
319-299/3	30AWG	100.5	.010”	$1.11	$5.30
319-299/2	28AWG	159.8	.013”	1.11	5.43
319-299/1	26AWG	254.1	.016”	1.13	5.54
319-299	24AWG	404.0	.020”	1.22	6.45
319-298	22AWG	642.4	.025”	1.32	7.37
319-297	20AWG	1022.0	.033”	1.68	11.04
319-296	18AWG	1642.0	.040”	2.43	17.48

NEOPRENE WELDING CABLE

Light, flexible cables with high resistance to abrasion, impact, flexing and twisting. Stranded bare copper conductor, tape wrap, black Neoprene rubber insulation. Other sizes available.

Cat. No.	Conductor Size	Conductor Strand	Nom. O.D.	Amps Cap.	Net 25-99′	100′-499′	500′-999′	1K′-Up
319-6112	6	266/30	.38”	75	$0.86	$0.62	$0.56	$0.53
319-6113	4	420/30	.43”	100	1.14	.81	.75	.71
319-6115	2	665/30	.43”	150	1.79	1.29	1.17	1.13

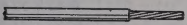
RETRACTILE COIL CORDS



FOR POWER TOOLS

For use on electric tools, soldering irons, electric appliances, etc., to eliminate loose dangling wires and to prevent them from tangling and twisting. Stranded copper conductors, with rubber insulation and a weather and oil resistant neoprene jacket overall. Operating temperature -20°C to +60°C.

Cat. No.	AWG & Stranding	Length Retr.	Length Extd.	Rated V.	Cord O.D.	Net Each
319-660-2	2 #18 (41x34)	2’	12’	300	.260”	$6.29
319-660-4	2 #18 (41x34)	4’	25’	300	.260”	11.33
319-663-2	4 #18 (41x34)	2’	12’	300	.385”	10.32
319-663-4	4 #18 (41x34)	4’	25’	300	.385”	19.37



UNSHIELDED TYPE EE TEFLON INSULATED 1000 VOLTS

Single stranded silver plated copper conductor, TFE extruded Teflon insulation. Temp. rating -65°C to +200°C. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus. *Stock colors as listed in stock insulation color table below. Specify desired color by adding color number to catalog number when ordering.

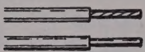
Cat. No.	MIL Type	AWG & Stranding	Nom. O.D.	Stock Colors*	Net 100′	Net 1000′
319-2874	EE-24	24 (19x36)	.055”	1-19	$12.71	$123.71
319-2875	EE-22	22 (19x34)	.062”	1-19	14.84	143.79
319-2876	EE-20	20 (19x32)	.070”	1-19	19.20	182.90
319-2877	EE-18	18 (19x30)	.080”	1-19	22.34	214.32
319-2878	EE-16	16 (19x29)	.089”	1 & 11-19	29.84	289.35
319-2879	EE-14	14 (19x27)	.106”	1 & 11-19	41.09	392.93
319-2879/12	EE-12	12 (19x25)	.124”	1 & 11-19	60.74	589.41

TEFLON HOOK-UP WIRE

TYPE E. MIL-W-16878D

Stranded silver plated copper conductor, extruded .010” wall extruded TFE Teflon insulation. Impervious to acids, alkalies, oils, grease, flame, moisture, etc. Temp. rating -65°C to +200°C. Prices shown are for solid colors. Striped colors are available (11 thru 19) at the added costs listed below. See preceeding page for the list of stock colors. Rated for 600 volts.

Cat. No.	MIL Type	AWG & Stranding	Nom. O.D.	Net 100′	Net 1000′
319-5851	E-30	30 (7x38)	.028”	$4.50	$25.58
319-5852	E-28	28 (7x36)	.031”	4.71	26.66
319-5853	E-26	26 (7x34)	.035”	5.09	30.32
319-5854	E-24	24 (19x46)	.040”	6.23	40.77
319-5854/7	E-24	24 (7x32)	.039”	5.39	32.00
319-5855	E-22	22 (19x34)	.046”	6.83	44.31
319-5855/7	E-22	22 (7x30)	.045”	6.23	39.03
319-5856	E-20	20 (19x32)	.054”	7.86	52.98
319-5856/7	E-20	20 (7x28)	.053”	7.28	50.12
319-5857	E-18	18 (19x30)	.064”	10.37	74.61
319-5858	E-16	16 (19x29)	.073”	12.65	93.65
Additional cost for striped colors				.....	11.25



HOOK-UP WIRE

PLASTIC INSULATED PER MIL-W-76B

Single conductors, medium wall polyvinylchloride insulation .016” thick. Rated 1000 volts. Temp. range -40°C to +80°C. Resistant to acids, alkalies, oil, flame, moisture and fungus. *Striped colors **$0.15 additional per 100 ft., $1.50 additional per 1000 ft.**

Cat. No.	MIL MW-C-	AWG & Stranding	In. Dia.	*Colors	Net 100′	Net 1000′	
						1-4	5-9
319-1550	24(7)U	24 (7x32)	.059	1-30	$1.53	$9.90	$9.42
319-1551	22(7)U	22 (7x30)	.064	1-30	1.71	11.70	11.15
319-1553	20(10)U	20 (10x30)	.073	1-30	1.98	13.35	12.71
319-1555	18(16)U	18 (16x30)	.084	1-30	2.42	17.93	16.91
319-1557	16(26)U	16 (26x30)	.095	1-30	3.32	25.80	24.57
319-1559	14(41)U	14 (41x30)	.110	†	4.68	40.35	38.43
319-1560	12(65)U	12 (65x30)	.125	†	7.26	59.40	56.58
319-1561/24	24(1)U	24 solid	.055	1-30	1.47	8.03	7.64
319-1561	22(1)U	22 solid	.060	1-30	1.44	9.15	8.72
319-1563	20(1)U	20 solid	.066	1-30	1.74	11.55	11.00
319-1565	18(1)U	18 solid	.074	1-10	2.22	15.75	15.00

†Colors 1 thru 19, 28 thru 30.

NEW IRRADIATED PVC HOOK-UP WIRE

MEETS MIL-16878D TYPE B

Stranded tinned copper, color coded, 0.10” irradiated polyvinylchloride insulation. Increased heat resistance, solder iron resistance, also resistant to acids, oils, flame, moisture, solvents, fungus and alkalis. Temperature rating -55°C to 105°C. Voltage rating 600 volts.

Cat. No.	Mil Type	AWG & Strand	Nom. O.D.	Stock Colors	Net 1000′
319-7054	B-24	#24 (7x32)	.043”	1-10	$14.55
319-7054/19	B-24	#24 (19x36)	.043”	1-10	18.45
319-7055	B-22	#22 (7x30)	.050”	1-10	16.50
319-7055/19	B-22	#22 (19x34)	.050”	1-10	21.74
319-7056	B-20	#20 (7x28)	.058”	1-10	20.63
319-7056/19	B-20	#20 (19x32)	.058”	1-10	22.65
319-7057	B-18	#18 (7x26)	.068”	1-10	27.00
319-7057/19	B-18	#18 (19x30)	.068”	1-10	29.09
319-7058/19	B-16	#16 (19x29)	.077”	1-10	35.45

MIL-W-16878D HOOK-UP WIRE TYPE B UNCOVERED PLASTIC

Single conductor stranded tinned copper with polyvinylchloride insulation. Rated 600 volts. Temp. range -55°C to +105°C.

319-1850	B-32	32 (7x40)	.028	1-19	$1.92	$14.10	$13.43
319-1851	B-30	30 (7x38)	.032	1-19	1.61	11.10	10.58
319-1852	B-28	28 (7x36)	.034	1-19	1.58	10.13	9.65
319-1853	B-26	26 (7x34)	.038	1-19	1.58	11.03	10.50
319-1854	B-24	24 (7x32)	.043	1-19	1.58	10.35	9.86
319-1855	B-22	22 (7x30)	.050	1-19	1.73	11.33	10.79
319-1856	B-20	20 (7x28)	.058	1-19	2.09	13.65	13.01
319-1857	B-18	18 (7x26)	.068	1-19	2.30	17.48	16.65
319-1858/19	B-16	16 (10x29)	.085	1-19	2.97	23.25	22.14
319-1859/19	B-14	14 (19x27)	.099	1-19	5.51	40.80	38.87

MINIATURE TEFLON MIL-W-16878D

Single conductor silver-plated copper. Extruded TFE Teflon insulation. Temperature rating -65°C to +200°C. *Stock colors.

TYPE ET. 250 VOLTS WRKG.

Cat. No.	AWG & Stranding	Nom. O.D.	*Colors	Net 100′	Net 1000′
319-2840/7	32 (7x40)	.021”	1-10	$4.25	$34.28
319-2841/7	30 (7x38)	.024”	1-10	4.04	32.27
319-2842/7	28 (7x36)	.027”	1-10	3.99	31.73
319-2843/7	26 (7x34)	.031”	1-10	4.13	33.21
319-2844/7	24 (7x32)	.036”	1-10	5.04	42.26
319-2845/7	22 (7x30)	.042”	1-10	5.96	51.57
319-2841/1	30 solid	.022”	1-10	3.78	29.57
319-2842/1	28 solid	.025”	1-10	3.69	28.76
319-2843/1	26 solid	.028”	1-10	3.78	30.38
319-2844/1	24 solid	.032”	1-10	4.07	33.35

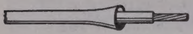
TYPE E. 600 VOLTS WRKG.

Cat. 319-⋆	AWG & Stranding	Nom. O.D.	*Colors	Net 100′		Net 1000′	
				1-1999′	2M-9999′	1-1999′	2M-9999′
5853/1	26 solid	.036”	1-10	$3.35	$3.18	$25.19	$23.99
5854/1	24 solid	.040”	1-10	3.71	3.53	28.80	27.44
5855/1	22 solid	.045”	1-10	4.35	4.14	35.19	33.51
5856/1	20 solid	.052”	1-10	5.28	5.03	44.52	42.41
5857/1	18 solid	.060”	1-10	6.75	6.44	59.34	56.52

⋆Include entire Cat. No. when ordering. i.e., 319-5853/1.

ALPHA WIRE PRODUCTS

HOOK-UP WIRES



UNSHIELDED
NYLON INSULATED
MIL-W-5086A

For aircraft electrical systems. Single stranded tinned copper conductor, white polyvinylchloride insulation, clear nylon (polyamide) jacket overall. Voltage rating 600. Temp. rating -55°C to +105°C. Resists effects of water, lubricants and fuels, alcohol, dilute acids, alkalis, fungus and abrasion.

Cat. No.	MIL Type	AWG & Stranding	Nom. O.D.	Net 100′	Net 1000′
319-1381	AN-22	22 (19x34)	.068"	$4.11	$31.35
319-1382	AN-20	20 (19x32)	.078"	4.59	36.53
319-1383	AN-18	18 (19x30)	.088"	5.49	45.14
319-1384	AN-16	16 (19x29)	.098"	5.99	49.52
319-1385	AN-14	14 (19x27)	.117"	7.91	68.90
319-1386	AN-12	12 (19x25)	.137"	11.90	100.83

U/L HOOK-UP WIRE, 300 V C-STYLE NO. 1007

Stranded tinned copper conductors, .016" polyvinylchloride insulation. Opr. temp. range -10°C to +80°C.

Cat. No.	AWG & Stranding	In. Dia.	Stock Colors	Net 100′	Net 1000′ 1-4	5-9
319-3050	24 (7x32)	.057	1-19	$2.81	$11.22	$10.70
319-3051	22 (7x30)	.065	1-19	3.30	14.00	13.34
319-3053	20 (10x30)	.071	1-19	3.36	14.75	14.04
319-3055	18 (16x30)	.080	1-19	3.90	20.15	19.19
319-3057	16 (26x30)	.095	1-19	4.77	31.56	30.06

U/L HOOK-UP WIRE, 600 V C-STYLE NO. 1015

Stranded tinned copper conductors, .016" polyvinylchloride insulation. Opr. temp. range -10°C to +105°C.

319-3071	22 (7x30)	.095	1-10	$1.83	$12.75	$12.15
319-3073	20 (10x30)	.102	1-10	2.15	16.13	15.36
319-3075	18 (16x30)	.112	1-10	2.67	20.48	19.50
319-3077	16 (26x30)	.125	1-10	3.27	27.45	26.15
319-3079	14 (41x30)	.142	1-10	4.79	40.65	38.72

U/L STYLE 1429 HOOK-UP WIRE
IRRADIATED PVC INSULATION

Tinned copper conductor, heavy tin or over-coated tinned copper. Thin wall irradiated cross-linked PVC insulation, .010" nominal wall. Temperature -55°C to 80°C.

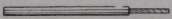
Cat. No.	AWG & Strand	Nom. O.D.	Stock Colors	Net 1000′
319-7149	# 26 (7x54)	.038"	1-10	$16.82
319-7150	# 24 (7x32)	.043"	1-10	15.87
319-7151	# 22 (7x30)	.050"	1-10	17.16
319-7153	# 20 (7x28)	.058"	1-10	18.89
319-7155	# 18 (7x26)	.068"	1-10	26.13
319-7157	# 16 (19x29)	.077"	1-10	35.45
319-7161/24	# 22 Solid	.045"	1-10	13.65
319-7161	# 24 Solid	.040"	1-10	15.60
319-7163	# 20 Solid	.054"	1-10	19.52

U.L. KYNAR®
HOOKUP WIRE
OPERATING TEMP. 125°C 300 VOLTS

Designed for use in automatic wire wrapping equipment for applications in the computer and related industries. Solid, silver-plated, oxygen-free, high conductivity (OFHC) copper conductor, extruded Kynar® (Polyvinylidene fluoride) insulation. Extremely tough; high cut-through resistance. Self-extinguishing, will not support combustion. Resistant to most chemicals and solvents, ultra violet and weathering. Packaged on spools having an extra large diameter core to minimize "sets" caused by small bend radius. Conforms to all requirements of U.L. style 1422.

Cat. No.	AWG Size	Nom. O.D.	Colors	Lbs. Wt.	Net 1000′
319-5951	30 solid	.020"	1-10	1.0	$19.80
319-5953	26 solid	.026"	1,3-6,9	1.8	23.46
319-5954	24 solid	.030"	1,3-6	2.4	28.98

TEFZEL COMPUTER WIRE
RUGGED & FLEXIBLE WIRE-WRAP



Solid silver-plated OFHC copper conductor. Tefzel insulation (copolymer of ethylene and tetra fluourethylene). Tefzel is a newly developed insulation that provides a high temperature, thin-wall wire suitable for wire wrap insulation. Tefzel has high cut-thru and abrasion resistance and long flex life. The material has a low dielectric constant of 2.6. Temperature range is from -100°C to +150°C continuous. Like Teflon, Tefzel is chemically inert, with no-known solvent and is rated non-burning or self-extinguishing. Stock Colors: White,

CONTINUED IN NEXT COLUMN

TEFZEL COMPUTER WIRE CONT.

Black, Red, Green, Yellow, Blue, Brown, Orange, Slate, Violet. Applications: Computer wire, aircraft instrumentation, point-to-point wiring in all compact packaging modules. Also available in specially cut and both-end stripped lengths for automatic and manual wire-wrap machines and tools.

Cat.	Cond.	Wall Thick	Nom. O.D.	100′	1000′
319-1805	30AWG	.005"	.019"	$6.17	$53.22
319-1806	28AWG	.005"	.023"	6.57	57.35
319-1807	26AWG	.005"	.026"	6.99	61.68
319-1808	24AWG	.005"	.029"	7.77	69.51

RIBBON CABLE
ROUND CONDUCTOR
FLAT BONDED

Has all the advantages of a flat compact profile plus ease of termination and stripping. Saves space, simplifies cable identification and simple to separate and terminate individual conductors. With all standard wire connectors, jacks, pins and terminations. Each conductor, stranded tinned copper, color coded PVC insulation, conductors specially bonded into flat configuration.

TYPE B MEETS MIL-W-16878D

Voltage rating: 600 volts. Temp. ratings: -55°–+105°C. Nom. wall thickness .010". Standard put-up 100 ft. roll.

Cat. No.	No. Cond.	—Conductor— Size	Strand	Nom. O.D. W. x T.	Net 100′ Rolls 1-4	5-9
319-3530	10	22	19/34	.510 x .051	$40.89	$31.88
319-3531	15	22	19/34	.765 x .051	61.34	47.82
319-3532	20	22	19/34	1.05 x .051	81.78	63.75
319-3533	30	22	19/34	1.57 x .051	122.66	95.64
319-3540	10	24	19/36	.440 x .044	34.31	26.69
319-3541	15	24	19/36	.662 x .044	51.47	40.04
319-3542	20	24	19/36	.883 x .044	68.61	53.36
319-3543	30	24	19/36	1.35 x .044	102.92	80.04
319-3550	10	26	7/34	.392 x .039	26.52	20.63
319-3551	15	26	7/34	.587 x .039	39.77	30.95
319-3552	20	26	7/34	.783 x .039	53.01	41.24
319-3553	30	26	7/34	1.19 x .039	79.53	61.86
319-3560	10	28	7/36	.351 x .035	30.50	23.75
319-3561	15	28	7/36	.523 x .035	45.74	35.61
319-3562	20	28	7/36	.701 x .035	60.99	47.48
319-3563	30	28	7/36	1.06 x .035	91.47	71.22
319-3570	10	30	7/38	.311 x .032	35.87	27.90
319-3571	15	30	7/38	.482 x .032	53.81	41.85
319-3572	20	30	7/38	1.05 x .032	71.73	55.79
319-3573	30	30	7/38	.965 x .032	105.87	83.69

MIL-W-16878-D TYPE C U.L. 2444
Nom. Wall .016" 300 Volts 80°C

Conductor size: 22AWG, 7/30 strand.

Cat. No.	No. of Cond.	Width	Thick	Net 100′	Net 500′	Net 1000′
319-3505	5	.065" x	.32"	$23.43	$112.20	$219.45
319-3510	10	.065" x	.64"	45.54	222.75	438.90
319-3515	15	.065" x	.96"	69.30	334.95	660.00
319-3520	20	.065" x	1.92"	90.53	446.70	890.76

MACHINE TOOL WIRE
UL LISTED. TYPE MTW

For use with machine tools and appliances where temperatures do not exceed 90°C. in dry locations; 60°C. where exposed to moisture, oil, or coolants. Working volts 600 volts. Stranded bare copper conductors with thermoplastic insulation. Manufactured to the latest NEC code. *Stock wire colors. †Wall thickness.

Cat. No.	AWG & Stranding	Wall †	Nom. O.D.	*Colors	Net 500′
319-3090	16 (26x30)	.031"	.122"	1-10	$13.41
319-3091	14 (19x.0147)	.031"	.138"	1-10	17.75
319-3092	14 (19x.0147)	.046"	.170"	1-10	19.28
319-3093	12 (19x.0185)	.046"	.189"	1-10	26.24
319-3094	10 (19x.0234)	.046"	.214"	1-10	39.86
319-3095	8 (19x.0295)	.062"	.277"	1-10	64.19
319-3096	6 (19x.0372)	.062"	.320"	1-10	101.97
319-3097	4 (19x.0469)	.062"	.365"	1-10	148.01

MINIATURE COMMUNICATION COIL CORD

For maximum flexibility. Stranded copper conductors with polyvinylchloride insulation and jacket. 6" straight lead on each end.

Cat. No.	AWG & Stranding	Retr.	Length Extd.	Rated V.	Cord O.D.	Net Each
319-652	4 #28 (19x40)	2'	10'	100	.150"	$6.47

COAX CONNECTOR REFERENCE

MILITARY TO AMPHENOL PART NUMBERS

MIL CW-/U	AMPHENOL No.	Ser.
23	31-006	BNC
23A	31-026	BNC
55	31-007	BNC
55A	31-027	BNC
59	31-017	BNC
82	31-210	BNC
IL DA-/U		
2	9550	HN
MIL M-		
58	83-1T	UHF
59A	83-58	UHF
3329/3-01-03	31-320	BNC
3329/3-01-04	31-326	BNC
3329/3-05	31-321	BNC
3329/3-06	31-324	BNC
3329/3-07	31-323	BNC
3329/3-08	31-327	BNC
3329/3-09	31-333	BNC
3329/3-12	31-328	BNC
3329/3-13	31-331	BNC
3329/3-14	31-330	BNC
3329/3-15	31-342	BNC
3329/3-16	31-341	BNC
3329/3-19	31-343	BNC
3329/3-20	31-346	BNC
3329/3-21	31-345	BNC
3329/4-01-03	31-2367	TNC
3329/4-02-04	31-2373	TNC
3329/4-05	31-2368	TNC
3329/4-06	31-2370	TNC
3329/4-07	31-2374	TNC
3329/4-08	31-2380	TNC
3329/4-11	31-2375	TNC
3329/4-12	31-2377	TNC
3329/4-13	31-2389	TNC
3329/4-14	31-2388	TNC
3329/4-17	31-2390	TNC
3329/4-18	31-2392	TNC
9012/01-0001	82-354	N
9012/01-0002	82-352-1	N
9012/01-0005	82-352	N
9012/01-0006	82-341	N
9012/01-0007	82-340	N
9012/01-0008	82-332	N
9012/01-0013	82-342	N
9012/02-0001	82-358	N
9012/02-0002	82-536-1	N
9012/02-0003	82-356	N
9012/02-0004	82-362	N
9012/02-0005	82-360-1	N
9012/02-0006	82-360	N
9012/02-0007	82-338	N
9012/02-0008	82-337	N
9012/02-0009	82-333	N
9012/02-0014	82-339	N
9012/02-0015	82-344	N
9012/02-0016	82-343	N
9012/02-0017	82-334	N
9012/03-0001	82-366	N
9012/03-0002	82-364	N
9012/03-0003	82-347	N
9012/03-0004	82-346	N
9012/03-0005	82-335	N
9012/03-0010	82-348	N
9012/04-0001	82-369	N
9012/04-0002	82-368	N
9012/05-0001	82-357	N
9012/05-0002	82-349	N
9012/05-0003	82-336	N
IL MT-/U		
12	1600	BNC
IL MX-/U		
5	10900	BNC
5A	87175	BNC
7	10925	BNC
9	5375	UHF
3	5475	UHF
4	4700	BNC
4A	39575	BNC
4	82-48	HN/N
4A	82-109	HN/N
3	82-106	N
42	82-512	C
43	82-513	C
86	82-517	C/N/HN
41	92-100	C/N/HN
62	16850	C/N/HN
30	1050	Term.
30A	78525	Term.

MIL MX-/U	AMPHENOL No.	Ser.
1531	4275	Term.
1554	1075	Term.
1684	1025	Term.
1684A	20475	Term.
1744	3975	Term.
1744A	21100	Term.
1801	4025	Term.
1802	6375	Term.
1802A	55950	Term.
MIL PL-		
275	83-22F	Twin
258	83-1J	UHF
259	83-1SP	UHF
259	83-822	UHF
259A	83-1SPN	UHF
259A	83-756	UHF
MIL SO-		
239	83-1R	UHF
239	83-1RTY	UHF
239A	83-798	UHF
MIL UG-/U		
18	3400	N
18B	82-86	N
18C	82-203	N
18D	82-3203	N
18F	82-354	N
19	3500	N
19B	82-87	N
19C	82-207	N
19D	82-3207	N
20	42000	N
20B	82-88	N
20C	82-210	N
20D	82-3210	N
20F	82-358	N
21	3900	N
21B	82-61	N
21C	82-96	N
21D	82-202	N
21E	82-3202	N
21H	82-352-1	N
22B	82-62	N
22C	82-95	N
22D	82-208	N
22E	82-3208	N
22G	82-360-1	N
23	48000	N
23A	7600	N
23B	82-63	N
23C	82-94	N
23D	82-209	N
23E	82-3209	N
23G	82-356-1	N
27A	82-64	N
27B	82-98	N
27C	82-213	N
28A	82-99	N
29	15000	N
29A	82-65	N
29B	82-101	N
30	82-66	N
30C	82-201	N
30D	91100	N
57A	45250	N
57B	82-100	N
58	82-24	N
58A	82-97	N
58B	82-368	N
59A	82-38	HN
59B	82-804	HN
59D	17900	HN
60A	82-39	HN
60B	82-814	HN
61A	82-40	HN
61B	82-815	HN
61C	11150	HN
83	14000	N/UHF
83B	34125	N/UHF
85	82-21	BN
87	82-42	BN
88	31-002	BNC
88A	14525	BNC
88B	31-018	BNC
88C	31-202	BNC
88D	31-2202	BNC
88E	31-3202	BNC
89	31-005	BNC
89A	31-019	BNC
89B	31-205	BNC

MIL UG-/U	AMPHENOL No.	Ser.
89C	31-2205	BNC
90	1300	BNC
91A	7200	N
92A	7700	N
93A	7800	N
94A	82-84	N
95A	82-89	N
96A	82-90	N
102	83-22SP	Twin
103	83-22R	Twin
104	83-22AP	Twin
105	83-22J	Twin
106	83-1H	UHF
107	4800	N
107A	82-36	N
107B	82-102	N
111	83-750	UHF
119A/UP	2850	Adapt.
146	4400	N/UHF
154	82-59	LC
155	8325	LC
159B	15550	N
159D	82-366	N
160A	82-67	N
160B	82-93	N
160D	91025	N
160E	82-364	N
167A	82-104	N
167D	82-215	N
167F	82-3215	N
175	83-185	UHF
176	83-168	UHF
177	83-765	UHF
177	83-765-1000	UHF
181A	5450	Pulse
182A	5550	Pulse
185	4500	BNC
188	23250	N
196	83-22T	Twin
201	31-830	BNC/N
201A	31-216	BNC/N
203	83-776	UHF
204A	82-105	N
204C	82-214	N
212A	82-91	HN
212B	12100	HN
212C	82-115	HN
215	3000	LC
216	4350	LC
224	29500	UHF
231	2750	N
252	2625	HN/LC
254A	31-016	BNC
255	2900	BNC/UHF
259A	2500	HN/LC
260	31-012	BNC
260A	31-021	BNC
260B	31-212	BNC
260C	31-2212	BNC
260D	31-3212	BNC
261	31-015	BNC
261A	31-022	BNC
261B	31-215	BNC
261C	31-2215	BNC
262	31-011	BNC
262A	31-023	BNC
262B	31-211	BNC
262C	31-2211	BNC
264	25750	Pulse
266	4575	UHF
271A	55000	LC/N
273	31-028	BNC/UHF
274	31-008	BNC
274A	31-208	BNC
274B	31-2208	BNC
287	43000	LC
287B	51525	LC
290	31-003	BNC
290A	31-203	BNC
291	31-001	BNC
291A	31-020	BNC
291B	31-201	BNC
291C	31-2201	BNC
306	31-009	BNC
306A	31-209	BNC
306B	31-2209	BNC
309	8900	BNC/HN
318	26700	N/UHF
332	58000	UHF
333	82-56	HN
333A	82-107	HN
333B	44025	HN
334	82-57	HN

MIL UG-/U	AMPHENOL No.	Ser.
334A	82-108	HN
335	3025	BNC/N
347A	7250	Plug-in
348A	7350	Plug-in
349	2975	BNC/N
349A	31-217	BNC/N
352	82-80	LC
352A	82-110	LC
352B	850	LC
357	83-21R	UHF
358	83-21SP	UHF
360	83-21J	UHF
363	83-1F	UHF
372	83-1HP	UHF
413	9950	HN
414	47000	BNC
414A	47025	BNC
421	6275	Twin
421B	32225	Twin
422	6225	Twin
423	6175	Twin
423B	32200	Twin
447	31-817	BNC
491	8425	BNC
491A	31-218	BNC
491B	31-2218	BNC
492A	31-220	BNC
492B	31-2220	BNC
492D	31-3220	BNC
493A	7925	Twin
494	8125	HN
495A	82-111	HN
495D	30350	HN
496	82-92	HN
498	6050	Plug-in
499A	7650	Plug-in
535	5675	BNC
536	34000	N
536B	34025	N
544	22225	Twin
556	35250	N
556B	36275	N
559	17750	BNC/HN
560	82-805	HN
564	82-508	C/N
565A	82-540	C/N
566A	82-536	C
567A	82-535	C
568	82-504	C
569	82-505	C
570	82-502	C
570A	82-614	C
571	82-501	C
572	82-503	C
573A	82-530	C
573B	28650	C
593	35500	N
594A	15425	N
594C	82-357	N
602	36500	N
603	34500	N
603A	34525	N
624	2075	BNC
625	5575	BNC
625B	31-236	BNC
626A	80025	C
627A	82-548	C
628A	82-532	C
632	82-521	C
634	82-515	C
635	83175	BNC/C
636A	83200	BNC/C
637	83225	C/UHF
642A	83150	C
643	82-514	C
646	83-1AP	UHF
657	31-102	BNC
657A	31-239	BNC
680	82-811	N
680B	82-369	N
691	89250	BNC/SM
692	89125	SM
693	89000	SM
697	89025	SM
699	89175	SM
700	89200	SM
701	83050	C
702	83350	C/HN
703A	83400	C/HN
704	81175	C
704A	74475	C
705	82-511	C
706	82125	C

MIL UG-/U	AMPHENOL No.	Ser.
707A	82-533	C
708A	80075	C
709A	82-534	C
710A	82-531	C
711A	80200	C
909	31-206	BNC
909A	31-2206	BNC
909B	31-3206	BNC
910	31-207	BNC
910A	31-2207	BNC
910B	31-3207	BNC
911A	31-237	BNC
912	31-238	BNC
912A	31-2238	BNC
913	31-204	BNC
913A	31-2204	BNC
914	31-219	BNC
925	9375	HN
927	33250	HN
928	1100	BNC
931	27000	MHV
932	28000	MHV
932A	27975	MHV
935A	82-211	N
935B	82-3211	N
937	82-622	C
938	82-523	C
940A	82-212	N
940B	82-3212	N
941A	82-204	N
941B	82-3204	N
943A	82-538	C
959	6775	BNC
961	28225	MHV
961A	28175	MHV
981	4775	Twin
982	92125	N
997A	8975	N
1003	12400	N
1016	28250	MHV
1016A	27075	MHV
1019	11050	HN
1033	84975	BNC
1034	5225	BNC/N
1050	2225	Plug-in
1050A	30775	Plug-in
1051	2175	Plug-in
1052	36000	N
1056	84650	BNC
1057	83-2R	Twin
1059	83-2J	Twin
1060	83-2SP	Twin
1094	31-221	BNC
1094A	31-2221	BNC
1095A	36250	N
1098	31-222	BNC
1098A	31-2222	BNC
1185	82-312	N
1185A	82-3312	N
1185B	82-352	N
1186	82-313	N
1186B	82-356	N
1187	82-314	N
1187B	82-360	N
1213	82-320	HN
1214	82-321	HN
1215	82-324	HN
1460	27-104	Sub. 27
1462	27-107	Sub. 27
1463	27-102	Sub. 27
1464	27-108	Sub. 27
1465	27-106	Sub. 27
1467	27-105	Sub. 27
1468	27-103	Sub. 27
1619	27-101	Sub. 27
1680	82-341	N
1681	82-340	N
1682	82-332	N
1687	82-338	N
1688	82-337	N
1689	82-333	N
1694	82-339	N
1695	82-342	N
1696	82-344	N
1697	82-343	N
1698	82-334	N
1699	82-347	N
1700	82-346	N
1701	82-335	N
1706	82-348	N
1707	82-349	N
1708	82-336	N

AMPHENOL AN/MS CONNECTOR

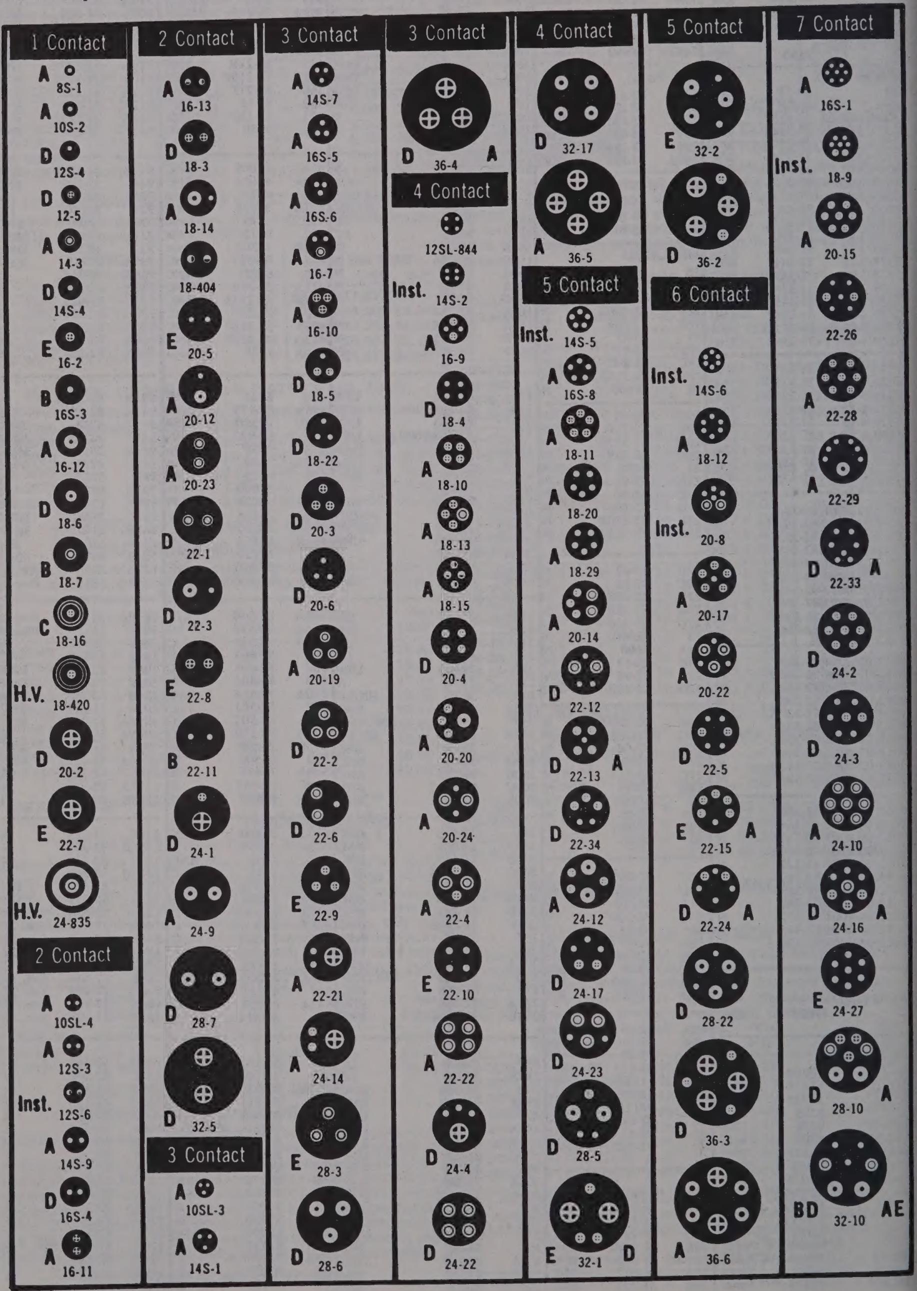
SERVICE		INST.	A	D	E	B	C
Limiting Operating Voltages at Sea Level	DC	250	700	1250	1750	2450	4200
	AC (rms)	200	500	900	1250	1750	3000
See Notes 1 and 2 at right.							
Effective Creepage (nominal)........		1/16"	1/8"	3/16"	1/4"	5/16"	1"
Mechanical Spacing (nominal)......		—	1/16"	1/8"	3/16"	1/4"	5/16"

CURRENT RATING

Contact Size........	20	16	12	8	4	0
Amperes...........	10	22	41	73	135	245

Note 1. Transients were not considered in calculating the Limiting Operating Voltages at Sea Level.

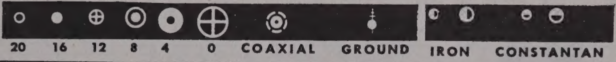
Note 2. Limiting Operating Voltages at 50,000 ft. altitude are approx. 25% of the Sea Level values.

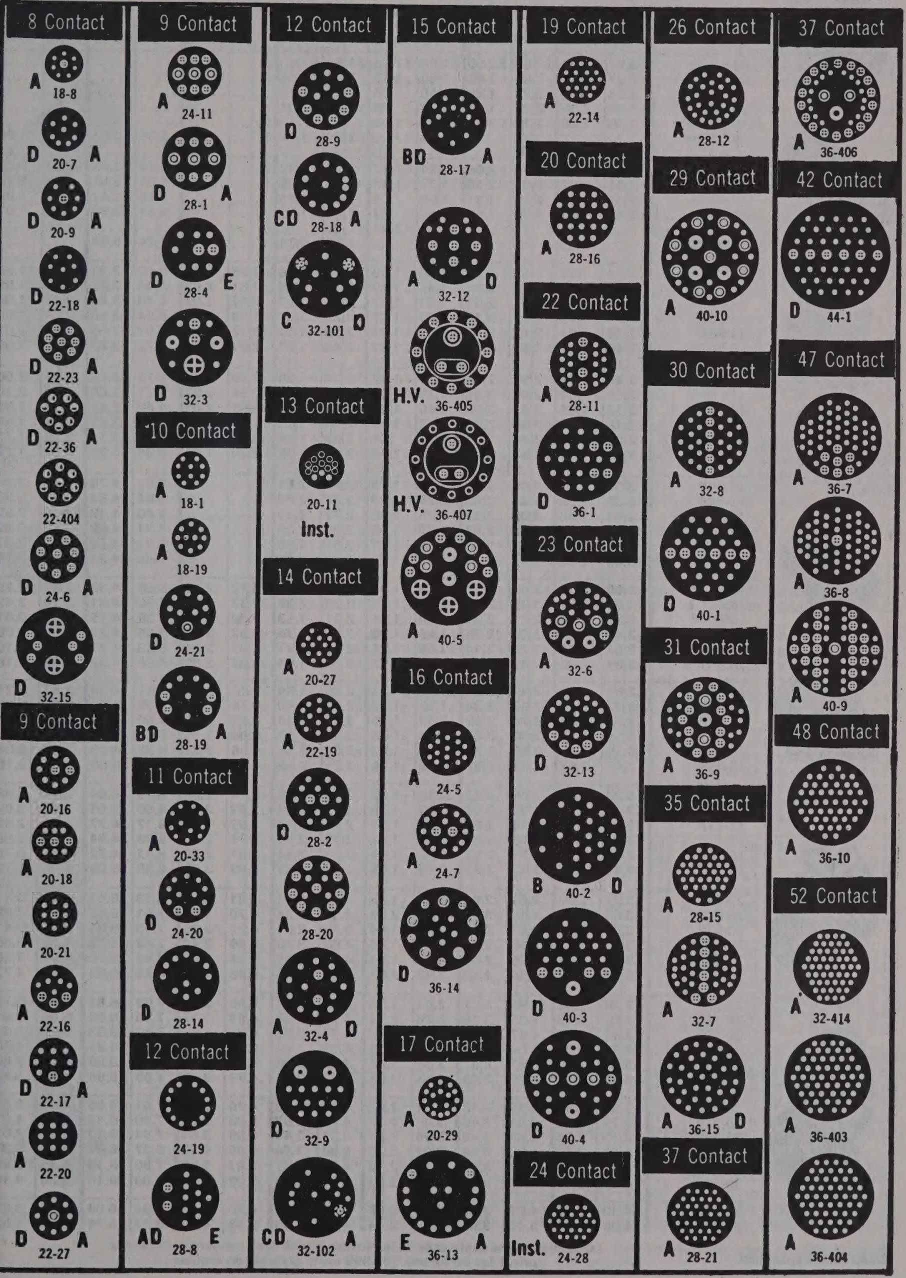


INSERT CONTACT ARRANGEMENT

Each insert is available with all male or
emale contacts. Contacts are non-rotat-
ng with all solder cups aligned for maxi-
num wiring speed. Contact sizes corre-
pond in number coding to wire sizes.

CODE OF WIRE SIZES

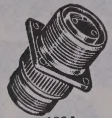




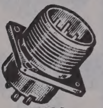
AMPHENOL AN/MS CONNECTORS

MADE IN ACCORDANCE WITH LATEST MIL SPECS.

Connector shell numbers are given at the top of the cost columns. A complete connector number consists of the shell number plus an insert number, such as 1-3100A-18-4P. "A" indicates a solid shell, "B" a split shell. -18-indicates the shell size in 16th of an inch. "P" indicates male, "S" female. All except 3102A require accessory clamp. For W, X, Y or Z polarization add $0.05 per unit.


3100A
Panel Jack

3101A
Cable Jack


3102A
Receptacle

Connectors shown above mate only with those shown below.

3106A
Plug

3106B
Plug†

3108A
Angle Plug*

3108B
Angle Plug†

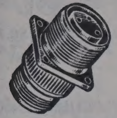
Shell Insert	1-3100A		1-3101A		1-3102A		1-3106A		1-3106B		1-3108A		1-3108B	
	Ea. 1-9	Ea. 10-49	Ea. 1-9	Ea. 10-49	Ea. 1-9	Ea. 10-49	Ea. 1-9	Ea. 10-49	Ea. 1-9	Ea. 10-49	Ea. 1-9	Ea. 10-49	Ea. 1-9	Ea. 10-49
08S-01P	$2.87	$2.21	$2.66	$2.05	$1.60	$1.23	$1.84	$1.43	....	....	....	....	....	....
08S-01S	2.87	2.21	2.66	2.05	1.60	1.23	2.84	1.43	....	....	....	....	....	....
10S-02P	2.94	2.27	2.39	1.86	1.10	.85	2.57	1.99	....	....	....	....	....	....
10S-02S	2.97	2.30	2.44	1.89	1.14	.89	2.59	2.01	....	....	....	....	....	....
10SL-03P	1.86	1.44	2.76	2.14	1.43	1.10	....	....	....	....	....	....	....	....
10SL-03S	....	....	....	....	....	....	2.24	1.74	....	....	3.96	3.07	2.07	1.60
12-05P	2.44	1.89	2.69	2.08	1.51	1.17	2.46	1.90	....	....	4.44	3.45	2.61	2.02
12-05S	2.61	2.02	2.92	2.25	1.73	1.33	2.66	2.05	....	....	4.64	3.59	2.82	2.18
12S-03P	2.01	1.56	2.35	1.81	1.08	.84	1.86	1.44	....	....	4.49	3.47	2.44	1.89
12S-03S	2.05	1.59	2.39	1.86	1.14	.89	1.94	1.50	....	....	4.54	3.50	2.48	1.91
12SL-844P	....	....	....	....	2.59	2.01	....	....	....	....	....	....	....	....
12SL-844S	....	....	....	....	....	....	4.82	3.73	....	....	7.24	5.58	....	....
14S-01P	2.14	1.65	2.61	2.02	1.40	1.08	2.14	1.65	2.59	2.01	4.42	3.41	2.39	1.86
14S-01S	2.18	1.68	2.66	2.05	1.43	1.10	2.18	1.68	2.61	2.02	4.44	3.45	2.44	1.89
14S-02P	2.11	1.63	2.59	2.01	1.37	1.07	2.11	1.63	2.57	1.99	4.40	3.40	2.38	1.84
14S-02S	2.29	1.77	2.72	2.10	1.51	1.17	2.29	1.77	2.69	2.08	4.54	3.50	2.54	1.98
14S-05P	2.35	1.81	2.82	2.18	1.60	1.23	2.35	1.81	2.76	2.14	4.62	3.56	2.59	2.01
14S-05S	2.44	1.89	2.92	2.25	1.71	1.32	2.44	1.89	2.89	2.24	4.72	3.65	2.67	2.06
14S-06P	2.44	1.89	2.92	2.25	1.71	1.32	2.44	1.89	2.89	2.24	4.72	3.65	2.67	2.06
14S-06S	2.48	1.91	2.97	2.30	1.75	1.35	2.48	1.91	2.94	2.27	4.77	3.68	2.72	2.10
14S-07P	2.14	1.65	2.61	2.02	1.40	1.08	2.14	1.65	2.59	2.01	4.42	3.41	2.39	1.86
14S-07S	2.18	1.68	2.66	2.05	1.43	1.10	2.18	1.68	2.61	2.02	4.44	3.45	2.44	1.89
14S-09P	2.03	1.57	2.48	1.91	1.27	.98	2.03	1.57	2.46	1.90	4.32	3.34	2.29	1.77
14S-09S	2.05	1.59	2.54	1.98	1.30	1.00	2.05	1.59	2.48	1.91	4.34	3.35	2.33	1.79
16-09P	3.00	2.32	3.09	2.38	1.84	1.43	2.87	2.21	....	....	5.51	4.26	3.53	2.74
16-09S	3.35	2.59	3.48	2.63	2.24	1.74	3.22	2.48	....	....	5.84	4.53	3.89	3.00
16-10P	2.92	2.25	3.00	2.32	1.75	1.35	2.72	2.10	....	....	5.40	4.18	3.46	2.67
16-10S	3.24	2.51	3.33	2.57	2.07	1.60	3.09	2.38	....	....	5.71	4.42	3.78	2.92
16-11P	2.69	2.06	2.82	2.18	1.58	1.21	2.57	1.99	....	....	5.21	4.03	3.24	2.51
16-11S	3.05	2.35	3.15	2.44	1.90	1.47	2.92	2.25	....	....	5.56	4.31	3.59	2.76
16S-01P	2.69	2.08	2.94	2.27	1.73	1.33	2.44	1.89	3.12	2.42	5.68	4.38	2.92	2.25
16S-01S	3.00	2.32	3.22	2.48	2.01	1.56	2.69	2.08	3.37	2.60	5.96	4.61	3.20	2.47
16S-04P	2.39	1.86	2.61	2.02	1.40	1.08	2.11	1.63	2.82	2.18	5.38	4.15	2.59	2.01
16S-04S	2.48	1.91	2.69	2.08	1.49	1.16	2.24	1.74	2.92	2.25	5.45	4.22	2.67	2.06
16S-05P	2.57	1.99	2.76	2.14	1.58	1.21	2.29	1.77	2.97	2.30	5.53	4.27	2.72	2.10
16S-05S	2.61	2.02	2.87	2.21	1.64	1.27	2.35	1.81	3.02	2.33	5.58	4.32	2.82	2.18
16S-08P	2.66	2.05	2.89	2.24	1.68	1.31	2.38	1.84	3.05	2.35	5.61	4.34	2.87	2.21
16S-08S	2.72	2.10	2.97	2.30	1.75	1.35	2.46	1.90	3.15	2.44	5.69	4.41	2.94	2.27
18-08P	3.35	2.59	3.78	2.92	2.33	1.79	3.22	2.48	3.83	2.97	6.50	5.01	3.96	3.07
18-08S	3.59	2.76	3.96	3.07	2.54	1.98	3.46	2.67	4.08	3.15	6.75	5.23	4.21	3.25
18-09P	3.20	2.47	3.59	2.76	2.11	1.63	3.02	2.33	3.65	2.82	6.32	4.89	3.80	2.94
18-09S	3.46	2.67	3.83	2.97	2.38	1.84	3.25	2.52	3.89	3.00	6.58	5.09	4.08	3.15
18-11P	3.24	2.51	3.65	2.82	2.18	1.68	3.09	2.38	3.74	2.88	6.39	4.94	3.86	2.98
18-11S	3.35	2.59	3.78	2.92	2.33	1.79	3.22	2.48	3.83	2.97	6.50	5.01	3.96	3.07
18-12P	3.02	2.33	3.46	2.67	1.95	1.51	2.89	2.24	3.52	2.72	6.17	4.77	3.65	2.82
18-12S	3.24	2.51	3.65	2.82	2.18	1.68	3.09	2.38	3.74	2.88	6.39	4.94	3.86	2.98
18-16P	2.94	2.27	3.33	2.57	1.86	1.44	2.76	2.14	3.37	2.60	6.11	4.72	3.55	2.75
18-16S	3.46	2.67	3.83	2.97	2.38	1.84	3.25	2.52	3.89	3.00	6.58	5.09	4.08	3.15
20-04P	3.37	2.60	3.63	2.80	2.14	1.65	3.76	2.91	4.21	3.25	7.13	5.51	4.42	3.41
20-04S	3.86	2.98	4.10	3.18	2.61	2.02	4.21	3.25	4.70	3.64	7.61	5.89	4.92	3.80
20-07P	3.37	2.60	3.63	2.80	2.14	1.65	3.76	2.91	4.21	3.25	7.13	5.51	4.42	3.41
20-07S	3.67	2.83	3.80	3.00	2.44	1.89	4.02	3.10	4.49	3.47	7.42	5.73	4.72	3.65
20-15P	3.76	2.91	3.95	3.06	2.48	1.91	4.10	3.18	4.54	3.50	7.46	5.78	4.77	3.68
20-15S	5.08	3.92	5.30	4.10	3.83	2.97	5.41	4.19	5.89	4.55	8.83	6.83	6.12	4.73
20-16P	3.78	2.92	3.96	3.07	2.54	1.98	4.11	3.19	4.55	3.52	7.52	5.81	4.82	3.73
20-16S	4.02	3.10	4.23	3.26	2.76	2.14	4.83	3.38	4.83	3.74	7.74	5.98	5.05	3.91
20-18P	3.91	3.02	4.17	3.22	2.67	2.06	4.27	3.30	4.75	3.67	7.67	5.93	4.97	3.83
20-18S	4.34	3.35	4.54	3.50	3.09	2.38	4.70	3.64	5.13	3.96	8.07	6.24	5.30	4.10
20-23P	3.63	2.80	3.83	2.97	2.38	1.84	3.95	3.06	4.42	3.41	7.35	5.69	4.64	3.59
20-23S	3.95	3.06	4.19	3.23	2.69	2.08	4.32	3.34	4.77	3.68	7.69	5.94	4.98	3.84
20-27P	3.86	2.98	4.10	3.18	2.61	2.02	4.21	3.25	4.70	3.64	7.61	5.89	4.92	3.80
20-27S	4.23	3.26	4.44	3.45	3.00	2.32	4.55	3.52	5.05	3.91	7.99	6.17	5.26	4.07
20-29P	4.19	3.23	4.40	3.40	2.94	2.27	4.51	3.49	4.98	3.84	7.94	6.13	5.21	4.03
20-29S	4.64	3.59	4.85	3.76	3.37	2.60	4.98	3.84	5.45	4.22	8.37	6.47	5.68	4.38
20-33P	4.17	3.22	4.38	3.38	2.92	2.25	4.49	3.47	4.97	3.83	7.89	6.10	5.15	3.99
20-33S	4.27	3.30	4.49	3.47	3.02	2.33	4.62	3.56	5.08	3.92	8.00	6.19	5.30	4.10
22-02P	4.10	3.18	4.27	3.30	2.61	2.02	4.10	3.18	4.70	3.64	7.84	6.06	4.97	3.83
22-02S	4.98	3.84	5.15	3.99	3.53	2.74	4.98	3.84	5.58	4.32	8.72	6.74	5.84	4.53

*Solid shell. †Split shell.

Quantity prices apply only to quantities of one type connector. Quantity prices for 50-99 and 100-999 units available on request.

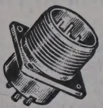
AMPHENOL AN/MS CONNECTORS

Continued from preceding page.



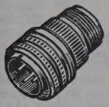
3100A
Panel Jack

3101A
Cable Jack

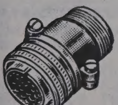


3102A
Receptacle

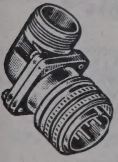
Connectors shown bove mate only vith those shown elow.



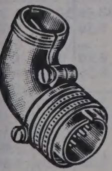
3106A
Plug



3106B
Plug*



3108A
Angle Plug*



3108B
Angle Plug†

Shell Insert	1-3100A Ea. 1-9	1-3100A Ea. 10-49	1-3101A Ea. 1-9	1-3101A Ea. 10-49	1-3102A Ea. 1-9	1-3102A Ea. 10-49	1-3106A Ea. 1-9	1-3106A Ea. 10-49	1-3106B Ea. 1-9	1-3106B Ea. 10-49	1-3108A Ea. 1-9	1-3108A Ea. 10-49	1-3108B Ea. 1-9	1-3108B Ea. 10-49
22-04P	$4.23	$3.26	$4.42	$3.41	$2.76	$2.14	$4.23	$3.26	$4.83	$3.74	$7.99	$6.17	$5.10	$3.93
22-04S	4.82	3.73	4.98	3.84	3.33	2.57	4.82	3.73	5.40	4.18	8.55	6.60	5.68	4.38
22-05P	3.95	3.06	4.17	3.22	2.48	1.91	3.95	3.06	4.54	3.50	7.69	5.94	4.83	3.74
22-05S	3.96	3.07	4.19	3.23	2.54	1.98	3.96	3.07	4.55	3.52	7.72	5.97	4.85	3.76
22-11P	3.24	2.51	3.46	2.67	1.79	1.39	3.24	2.51	3.83	2.97	6.99	5.40	4.11	3.19
22-11S	3.52	2.72	3.67	2.83	2.03	1.57	3.52	2.72	4.10	3.18	7.24	5.58	4.38	3.38
22-12P	4.23	3.26	4.42	3.51	2.76	2.14	4.23	3.26	4.83	3.74	7.99	6.17	5.10	3.93
22-12S	4.92	3.80	5.08	3.92	3.46	2.67	4.92	3.80	5.51	4.26	8.63	6.67	5.73	4.43
22-14P	4.70	3.64	4.85	3.76	3.22	2.48	4.70	3.64	5.26	4.07	8.42	6.51	5.56	4.31
22-14S	5.38	4.15	5.56	4.31	3.89	3.00	5.38	4.15	5.96	4.61	9.14	7.05	6.24	4.82
22-17P	4.19	3.23	4.38	3.38	2.69	2.08	4.19	3.23	4.77	3.68	7.94	6.13	5.05	3.91
22-17S	4.32	3.34	4.49	3.47	2.87	2.21	4.32	3.34	4.92	3.80	8.05	6.22	5.15	3.99
22-18P	3.89	3.00	4.10	3.18	2.44	1.89	3.89	3.00	4.49	3.47	7.64	5.90	4.77	3.68
22-18S	3.95	3.06	4.17	3.22	2.48	1.91	3.95	3.06	4.54	3.50	7.69	5.94	4.83	3.74
22-19P	4.62	3.56	4.82	3.73	3.15	2.44	4.62	3.56	5.21	4.03	8.33	6.44	5.51	4.26
22-19S	4.70	3.64	4.85	3.76	3.22	2.48	4.70	3.64	5.26	4.07	8.42	6.51	5.56	4.31
22-22P	4.72	3.65	4.92	3.80	3.24	2.51	4.72	3.65	5.30	4.10	8.48	6.56	5.58	4.32
22-22S	5.94	4.58	6.12	4.73	4.44	3.45	5.94	4.58	6.50	5.02	9.69	7.48	6.80	5.25
22-23P	4.51	3.49	4.72	3.65	3.05	2.35	4.51	3.49	5.10	3.03	8.27	6.39	5.40	4.18
22-23S	5.81	4.49	5.99	4.64	4.34	3.35	5.81	4.49	6.39	4.94	9.51	7.35	6.70	5.16
24-02P	4.75	3.67	4.77	3.68	3.02	2.33	4.83	3.74	5.89	4.55	8.66	6.84	5.38	4.15
24-02S	5.71	4.42	5.73	4.43	4.02	3.10	5.83	4.50	6.88	5.31	9.85	7.60	6.35	4.90
24-05P	5.26	4.07	5.30	4.10	3.55	2.75	5.38	4.15	6.43	4.97	9.39	7.26	5.89	4.55
24-05S	5.94	4.58	5.96	4.61	4.21	3.25	6.02	4.65	7.08	5.48	10.03	7.75	6.56	5.08
24-07P	5.51	4.26	5.53	4.27	3.78	2.92	5.58	4.32	6.65	5.13	9.58	7.41	6.12	4.73
24-07S	5.94	4.58	5.96	4.61	4.21	3.25	6.02	4.65	7.08	5.48	10.03	7.75	6.56	5.08
24-10P	6.86	5.30	6.88	5.31	5.13	3.96	6.93	5.36	8.00	6.19	10.98	8.49	7.46	5.78
24-10S	7.87	6.09	7.89	6.10	6.45	4.99	7.97	6.16	8.99	6.94	11.96	9.23	8.50	6.57
24-11P	5.84	4.53	5.89	4.55	4.17	3.22	5.96	4.61	7.01	5.42	10.00	7.72	6.47	5.00
24-11S	7.44	5.75	7.46	5.78	5.71	4.42	7.54	5.82	8.61	6.66	11.57	8.93	8.07	6.24
24-12P	6.12	4.73	6.15	4.76	4.40	3.40	6.22	4.81	7.29	5.65	10.21	7.88	6.75	5.23
24-12S	7.33	5.67	7.35	5.69	5.61	4.34	7.42	5.73	8.50	6.57	11.44	8.85	7.97	6.16
24-20P	4.92	3.80	4.95	3.81	3.20	2.47	4.98	3.84	6.04	4.67	8.99	6.94	5.53	4.27
24-20S	4.97	3.83	4.98	3.84	3.24	2.51	5.05	3.91	6.12	4.73	9.08	7.02	5.58	4.32
24-27P	4.21	3.25	4.23	3.26	2.48	1.91	4.32	3.34	5.38	4.15	8.31	6.43	4.83	3.74
24-27S	4.34	3.35	4.38	3.38	2.61	2.02	4.42	3.41	5.51	4.26	8.48	6.56	4.97	3.83
24-28P	5.73	4.43	5.81	4.49	4.08	3.15	5.84	4.53	6.86	5.30	9.88	7.64	6.39	4.94
24-28S	6.50	5.01	6.56	5.08	4.82	3.73	6.60	5.11	7.67	5.93	10.64	8.22	7.13	5.51
28-02P	5.40	4.18	5.99	4.64	3.78	2.92	5.64	4.35	6.17	4.77	9.58	7.41	6.24	4.82
28-02S	5.73	4.43	6.35	4.90	4.17	3.22	5.99	4.64	6.56	5.08	10.00	7.72	6.60	5.11
28-09P	5.69	4.41	6.27	4.85	4.10	3.18	5.94	4.58	6.47	5.00	9.90	7.65	6.56	5.08
28-09S	6.24	4.82	6.83	5.27	4.62	3.56	6.45	4.99	7.01	5.42	10.44	8.07	7.08	5.48
28-11P	6.12	4.73	6.71	5.19	4.49	3.47	6.32	4.89	6.88	5.31	10.34	7.99	6.93	5.36
28-11S	7.42	5.73	8.00	6.19	5.81	4.49	7.64	5.90	8.20	6.33	11.63	9.00	8.27	6.39
28-12P	6.35	4.90	6.93	5.36	4.75	3.67	6.58	5.09	7.13	5.51	10.58	8.18	7.20	5.57
28-12S	7.42	5.73	8.00	6.19	5.81	4.49	7.64	5.90	8.20	6.33	11.63	9.00	8.27	6.39
28-15P	7.13	5.51	7.72	5.97	5.53	4.27	7.35	5.69	7.94	6.13	11.33	8.76	7.99	6.17
28-15S	8.22	6.36	8.83	6.83	6.60	5.11	8.48	6.56	8.99	6.94	12.43	9.61	9.08	7.02
28-16P	6.27	4.85	6.88	5.31	4.70	3.64	6.50	5.01	7.08	5.48	10.49	8.11	7.13	5.51
28-16S	6.35	4.90	6.93	5.36	4.75	3.67	6.58	5.09	7.13	5.51	10.58	8.18	7.20	5.57
28-17P	5.36	4.14	5.94	4.58	3.74	2.88	5.56	4.31	6.12	4.73	9.51	7.35	6.12	4.73
28-17S	5.69	4.41	6.27	4.85	4.10	3.18	5.94	4.58	6.47	5.00	9.90	7.65	6.56	5.08
28-18P	5.15	3.99	5.73	4.43	3.53	2.74	5.40	4.18	5.96	4.61	9.39	7.26	6.02	4.65
28-18S	5.64	4.35	6.24	4.82	4.02	3.10	5.84	4.53	6.43	4.97	9.85	7.60	6.47	5.00
28-10P	6.17	4.77	6.77	5.24	4.54	3.50	6.39	4.94	6.93	5.36	10.38	8.02	7.01	5.42
28-20S	6.86	5.30	7.44	5.75	5.25	4.05	7.08	5.48	7.64	5.90	11.07	8.56	7.69	5.94
28-21P	7.35	5.69	7.97	6.16	5.71	4.42	7.57	5.85	8.12	6.27	11.57	8.93	8.20	6.33
28-21S	8.33	6.44	8.93	6.90	6.75	5.23	8.59	6.64	9.15	7.06	12.54	9.69	9.19	7.11
32-07P	7.79	6.02	8.31	6.41	6.02	4.65	9.14	7.05	9.17	7.10	13.76	10.64	9.60	7.42
32-07S	9.90	7.65	10.44	8.07	8.12	6.27	11.22	8.68	11.29	8.73	15.92	12.30	11.76	9.08
32-12P	6.35	4.90	6.88	5.31	4.55	3.52	7.67	5.93	7.72	5.97	12.37	9.56	8.20	6.33
32-12S	7.49	6.13	8.48	6.56	6.15	4.76	9.23	7.14	9.29	7.17	13.89	10.75	9.77	7.54
32-17P	9.57	7.39	10.10	7.81	7.79	6.02	10.88	8.41	10.96	8.47	15.54	12.01	11.39	8.80
32-17S	10.47	8.10	11.02	8.50	8.70	6.72	11.78	9.10	11.85	9.16	16.43	12.69	12.31	9.53
36-07P	11.07	8.56	11.31	8.74	8.42	6.51	12.11	9.35	12.37	9.56	17.18	13.27	12.95	10.01
36-07S	12.21	9.44	12.47	9.64	9.57	7.39	13.27	10.25	13.51	10.44	18.33	14.16	14.12	10.91
36-08P	10.70	8.27	10.98	8.49	8.07	6.24	11.78	9.10	11.98	9.27	16.83	13.00	12.58	9.73
36-08S	11.46	8.86	11.73	9.07	8.83	6.83	12.52	9.67	12.73	9.85	17.56	13.58	13.33	10.31
36-10P	10.58	8.18	10.79	8.34	7.94	6.13	11.61	8.97	11.85	9.16	16.68	12.88	12.43	9.61
36-10S	11.39	8.80	11.65	9.01	8.76	6.77	12.47	9.81	12.69	9.81	17.50	13.53	13.27	10.25
36-405P	17.49	13.51	17.71	13.69	14.85	11.48	18.55	14.34	18.76	14.49	23.61	18.24	19.34	14.94

Quantity prices for 50-99 and 100-999 units available on request. Unlisted AN/MS types are also available.
*Solid shell. †Split shell. **Write for quotations and delivery.**

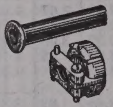
AMPHENOL CONNECTORS

AN3057 CABLE CLAMPS

For use with all AN/MS shell types except 3102A receptacle. Clamps hold insulated or shielded cables securely to connectors or fittings and relieve the strain on soldred joints. Die-cast aluminum construction.

AN Type	Fits Shell	Ea. 1-9	10-49	AN Type	Fits Shell	Ea. 1-9	10-49
1-3057-3	8S, 10S	$0.70	$0.57	1-3057-12	20, 22	$0.76	$0.70
1-3057-4	12, 12S	.64	.53	1-3057-16	24, 28	.94	.85
1-3057-6	14, 14S	.64	.53	1-3057-20	32	1.31	1.13
1-3057-8	16, 16S	.68	.56	1-3057-24	36	1.75	1.56
1-3057-10	18	.71	.57	1-3057-28	40	2.25	1.99

MS3057A CABLE CLAMPS
WITH RUBBER BOOT



Self-centering cable clamp for MS connectors. The AN3420 rubber boot protects the cable and weather proofs the rear end of connector. Additional boots are used for smaller cables.

Cat. No.	Fits Shell	Cable O. D.	Ea. 1-9	10-49	50-99	100-Up
1-MS3057-4A	10SL, 12S	.250"	$0.94	$0.84	$0.75	$0.61
1-MS3057-6A	14, 14S	.313"	.96	.85	.76	.62
1-MS3057-8A	16, 16S	.438"	.97	.86	.77	.63
1-MS3057-10A	18	.653"	1.01	.89	.80	.66
1-MS3057-12A	20, 22	.625"	1.12	.99	.89	.73
1-MS3057-16A	24, 28	.750"	1.41	1.24	1.11	.92
1-MS3057-20A	32	.938"	1.85	1.62	1.24	1.20
1-MS3057-24A	36	1.250"	2.28	1.99	1.77	1.48

AN3420-XX BUSHINGS ONLY

Same as used in the MS3057A Cable Clamps above. For replacement use or for use as inserts to accommodate smaller cables.

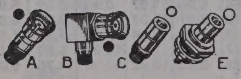
Cat. No.	Bushing Dia. O.D.	I.D.	Ea. 1-9	10-49	50-99	100-Up
1-AN3420-3	.210"	.130"	$0.10	$0.09	$0.08	$0.07
1-AN3420-4	.302"	.220"	.10	.10	.08	.07
1-AN3420-6	.427"	.312"	.12	.10	.09	.08
1-AN3420-8	.552"	.437"	.12	.10	.09	.08
1-AN3420-10	.615"	.562"	.16	.13	.12	.11
1-AN3420-12	.740"	.625"	.16	.13	.12	.11
1-AN3420-16	.927"	.750"	.20	.16	.15	.13
1-AN3420-20	1.240"	.937"	.29	.24	.21	.19
1-AN3420-24	1.365"	1.250"	.35	.28	.25	.23

AN/MS DUST CAPS

For live circuit, dust and dirt protection when connectors are not in use. Internal threads fit connectors as listed. Equipped with soft rubber gasket for dependable, water-tight seal. Retainer chain prevents loss.

AN/MS Type	Fits Shell	Ea. 1-9	10-49	AN/MS No.	Fits Shell	Ea. 1-9	10-49
1-9760-10	10S, 10SL	$0.64	$0.55	1-9760-20	20	$1.10	$0.95
1-9760-12	12, 12SL, 12S	.70	.62	1-9760-22	22	1.26	1.08
				1-9760-24	24	1.46	1.25
1-9760-14	14, 14S	.78	.66	1-9760-28	28	1.74	1.51
1-9760-16	16, 16S	.84	.73	1-9760-32	32	2.02	1.75
1-9760-18	18	1.00	.86	1-9760-36	36	2.24	1.94

SUBMINAX® SERIES 27
CRIMP-ON ATTACHMENT TO CABLES



Featuring full size electrical characteristics compressed into space-saving, weight-saving, design. In illustration black dot indicates connector end which mates with circle indicated end of other connectors. Made of solid brass with corrosion-resistant gold finish. Male contacts are brass. Female contacts are beryllium copper. Insulation Teflon.

50 OHM SUBMINAX PUSH-ON TYPE

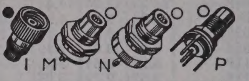
For attaching to .100" dia. jacket cables such as RG-174/U, RG-179/U, RG-187/U, and RG-188/U, by means of crimping tool.

Cat. No.	See Fig.	Unit Description	Ea. 1-24	25-99	100-499	500-999
1-27-1	A	Plug, cable	$0.89	$0.73	$0.61	$0.53
1-27-2	C	Jack, cable	.96	.79	.66	.57

SUBMINAX Connectors continued in next column.

SUBMINAX Connectors Continued.

Cat. No.	See Fig.	Unit Description	Ea. 1-24	25-99	100-499	500-999
1-27-3	E	Recept., blkh.	$1.28	$1.05	$0.88	$0.76
1-27-6	B	Plug, right angle	2.45	2.01	1.69	1.46
1-227-900	–	Crimping tool	35.00	....	....	....



50 OHM SUBMINAX SCREW-ON TYPE

For attaching to .100" jacket dia. cables such as RG-174/U, RG-179/U, RG-187/U, and RG-188/U by means of crimping tool.

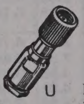
Cat. No.	See Fig.	Unit Description	Ea. 1-24	25-99	100-499	500-999
1-27-7	I	Plug, cable	$0.87	$0.71	$0.60	$0.52
1-27-9	M	Recept., blkh.	.77	.63	.53	.46
1-27-12	N	Recept., hermetic#	2.53	2.07	1.74	....
1-27-28	–	Adapter to BNC	2.56	2.10	1.76	1.52
1-27-800	P	Recept., pr. ckt. bd	2.21	1.81	1.52	1.31
1-227-900	–	Crimping tool	35.00	....	....	....

75 OHM SUBMINAX. SCREW-ON TYPE

Similar in appearance but slightly larger than the 50 ohm group. For attaching to .150" jacket dia. cables such as RG-180/U, RG-195/U, and A21-597 by means of crimping tool.

Cat. No.	See Fig.	Unit Description	Ea. 1-24	25-99	100-499	500-999
1-27-19	I	Plug, cable	$1.21	$0.99	$0.83	$0.72
1-27-21	M	Recept., blkh.	1.41	1.16	.97	....
1-27-23	O	Adapter, blkh.	1.68	1.38	1.16	....
1-27-24	N	Recept., hermetic#	3.24	2.66	2.23	....

#Glass and Teflon insulation.



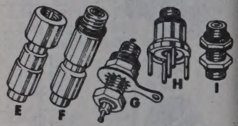
50 OHM SCREW-ON SUBMINAX FOR FIELD SERVICING

For assembly in the field without the use of special tools. This cable plug mates with the 50 ohm screw-on jacks listed above. For RG-178/U, or RG-196/U.

Cat. No.	Unit Description	Ea. 1-24	25-99	100-499	500-999
1-27-34	Plug, cable	$2.51	$2.06	$1.73	$1.49

NOTE. Other Amphenol SUBMINAX Connectors also available from stock. Prices and delivery will be quoted on request.

SUBMINAX® 5116
CO-AX CONNECTORS



For use with Subminax cables as listed below to frequencies as high as 4000 MHz. The 5116 Series is interchangeable with all existing sub-miniature connectors except the 27 Series. Center connector is soldered. RG-/U Types: (a) 178A, 178B, 196, 196A; (b) 179A, 179B, 187, 187A; (c) 180, 180A, 180B, 195, 195A, A21-597; (d) 188, 188A. *For printed circuit boards. **For bulkheads. When ordering give complete catalog number, i. e., 1-5116-37575.

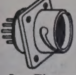
SCREW-ON TYPES

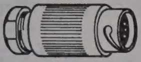
Cat. No. 1-5116-⋆	See Fig.	Ohms Imp.	Unit Type	RG-/U See	Ea. 1-24	25-99	100-499
037575	E	50	Plug	(d)	$3.46	$2.83	$2.38
037600	–	50	Angle plug	(a)	5.18	4.25	3.57
037625	–	75	Angle plug	(b)	....	....	5.14
037650	–	95	Angle plug	(c)	6.20	5.09	4.27
037675	–	50	Angle plug	(d)	6.36	5.22	4.38
037700	F	50	Jack	(a)	3.96	3.25	2.73
037725	F	75	Jack	(b)	....	....	3.19
037750	F	95	Jack	(c)	....	....	3.11
037775	F	50	Jack	(d)	....	....	3.72
037800	–	50	Blkhd. jack	(a)	5.36	4.39	3.69
037825	–	75	Blkhd. jack	(b)	....	....	3.69
037850	–	95	Blkhd. jack	(c)	....	....	4.69

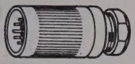
⋆Include entire Cat. No. when ordering.

SUBMINAX 5116 Continued On Next Page.

AMPHENOL CONNECTORS

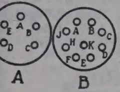

Sq. Flange Receptacle


Cable Receptacle


Cable Plug

MINIATURE "AN" TYPES

Miniature "AN" Type Connectors offer many new possibilities for aircraft and other types of critical instrumentation. Connector shells are aluminum with a neutral chromium finish. Insulation dielectric is blue diallyl phthalate. Contacts are high conductivity phosphor bronze with gold plating over silver. Connectors are pressure-proof and completely waterproof, either mated or apart. They withstand Government salt-spray tests by many hours in excess of standards. Cable types have built-in cable clamp which provides cable strain relief. Connectors listed below are for #20 AWG wire. Others are available for up to 24 contacts. Current rating 7.5 amps, 500 v-rms at sea level. Information regarding other types is available on request. *Cable opening.



"AN" CONNECTOR SIZES

Cable Types			Sq. Flange Types		
Size	Lgth.	Hole*	Size	Sq.	Lgth.
A	2.046"	.375"	B	1.062"	.828"
E	1.906"	.375"		.....	.....

		CABLE PLUG				CABLE RECEPT.				SQ. FLANGE RECEPT.			
on-cts	Insert	Cat. No.	Case Size	Ea. 1-49	50-99	Cat. No.	Case Size	Ea. 1-49	50-99	Cat. No.	Case Size	Ea. 1-49	50-99
male	A	1-165-33	A	$4.10	$3.23	1-165-35-1002	E	$6.85	$5.46	1-165-35	B	$2.90	$2.32
female	A	1-165-34	A	5.56	4.43	1-165-36-1003	E	7.51	5.99	1-165-36	B	3.52	2.79
male	B	1-165-13	A	4.26	3.40	1-165-15-1002	E	6.91	5.52	1-165-15	B	3.16	2.51
female	B	1-165-14	A	6.55	5.21	1-165-16-1003	E	8.32	6.61	1-165-16	B	4.04	3.22

"QUICK-CRIMP" TNC CONNECTORS

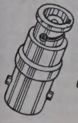
ew exclusive design has optional crimp or solder center contact. ven when center contact is crimped connector maintains its conant impedance. Connectors may be used with cables other than 50 ıms as a non-impedance match connector. Crimping cuts assembly me two-thirds or more. VSWR is identical to standard solder type NC connectors, 1.25 to 1, over a frequency range to 10,000 MHz. **nder RG-/U Cables: A** is RG-58/U, -58A/U, -58C/U, -141/U; **D** is G-59/U, -59A/U, -59B/U, -62C/U, -62A/U, -140/U.

at. o.	Type Unit	RG-/U Cable	Ea. 1-24	25-99	100-499	500-999
36825	Plug	A	$2.00	$1.64	$1.38	$1.19
36850	Cable jack	A	....	....	2.79	....
69350	Plug	D	2.00	1.64	1.38	....
69375	Cable jack	D	....	....	1.04	....
97775	Bulkhead jack	A	2.74	2.25	1.89	....
97800	Bulkhead jack	D	2.85	2.33	1.96	....
97850	Rt. angle plug	A	....	....	1.96	....
97925	Rt. angle plug	D	5.26	4.31	3.62	....

"QUICK-CRIMP" BNC CONNECTORS

mbody all of the features and advantages of the TNC Series conectors listed above. **Under RG-/U Cables: A** is RG-58/U, -58A/U, 8C/U, -141/U; **C** is RG-71/U; **D** is RG-58/U, -59/U, -59A/U, 2/U, -62A/U, -62C/U, -140/U. *Comparable.

at. o.	UG-/U Type*	Type Unit	RG-/U Cable	Ea. 1-24	25-99	100-499	500-999
36775	88E	Plug	A	$1.15	$0.94	$0.79	$0.68
36800	89C	Cable jack	A	1.58	1.30	1.09	.94
68175	260B	Plug	D	1.13	.93	.78	.67
95750	910B	Bulkhead jack	D	2.40	1.97	1.65	1.42
95775	910B	Bulkhead jack	C	2.38	1.95	1.64	....
95600	913A	Rt. angle plug	D	4.46	3.66	3.07	2.65
95625	913A	Rt. angle plug	C	4.62	3.79	3.18	2.74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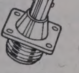
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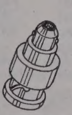
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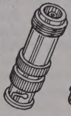
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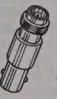
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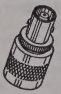

83225

BETWEEN SERIES ADAPTERS

ıese connectors provide a means of connecting between the rious RF connector series. They are of non-constant impedance ıt are designed to minimize electrical discontinuity.

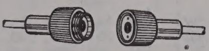
ıt. o.	RG-/U Type	Connector For	Ea. 1-24	25-99	100-499	500-999
83175	635	BNC plug to N jack	$4.11	$3.37	$2.83	$2.44
83200	636A	C plug to BNC jack	4.47	3.67	3.08	2.66
8900	309	HN plug to BNC jack	4.43	3.63	3.05	....
17750	559	BNC plug to HN jack	....	....	5.11	....
33200	...	BNC jack to MB jack	8.41	6.90	5.79	....
47250	...	MB plug to BNC jack	3.92	3.22	2.70	2.33
47275	...	BNC plug to MB jack	3.91	3.20	2.69	....
31-830	201	N plug to BNC jack	3.19	2.62	2.20	1.90
3025	335	BNC plug to N jack	4.75	3.89	3.27	....
31-217	349A	BNC plug to N jack	3.21	2.63	2.21	1.91

Continued In Next Column.

BETWEEN SERIES CONT'D.

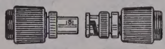
Cat. No.	RG-/U Type	Connector For	Ea. 1-24	25-99	100-499	500-999
1-89250	691	BNC jack to SM jack	....	....	2.25	....
1-76400	...	BNC jack to TNC jack	$2.92	2.39	2.01	1.73
1-79025	...	BNC plug to TNC jack	5.69	4.67	3.92	3.38
1-79675	...	TNC plug to BNC jack	4.05	3.32	2.79	2.41
1-2900	255	BNC plug to UHF jack	2.70	2.20	1.85	1.61
1-31-028	273	UHF plug to BNC jack	1.67	1.37	1.15	.99
1-83350	702	HN plug to C jack	7.35	6.03	5.06	....
1-83400	703A	C plug to HN jack	....	....	4.05	....
1-82350	...	C jack to LC jack	....	....	16.88	....
1-83950	...	C jack to LC jack	....	....	5.62	....

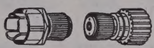
NEW APC-7 PRECISION 7mm
COAX CONNECTORS



A precision 50 ohm connector for use with 7 mm (inner diameter of outer conductor) rigid air line and semi-rigid (ALJAK) cable. Sexless coupling permits interconnection of any two APC-7's. Identical plane of electrical and mechanical contact permits accurate determination of the electrical length of a mated pair or of an air line assembly with a connector at each end. Stainless steel body with gold plated beryllium copper finish. Rexolite insulation. Frequency range 0-18 GHz. SWR 1.039 max. to 18 GHz. Contact resistance: inner 1.0 milliohms; outer 0.1 milliohms. Connectors are packaged in pairs in protective wooden box, with assembly instructions and certified SWR report.

Cat. No.	Use With	Size L. x Dia.	Ea. 1-99
1-131-1050	7 mm air line	.921" x .812"	$31.50
1-131-1019	ALJAK cable	1.828" x .812"	31.50

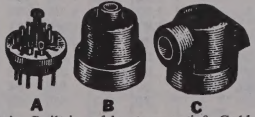

131-1027 131-1037


131-1022 131-1023

BETWEEN SERIES ADAPTERS

Cat. No.	Adapts	Size L. x Dia.	Ea. 1-99
1-131-1027	APC-7 to BNC female	1.609" x .812"	$50.00
1-131-1035	APC-7 to BNC male	1.812" x .812"	50.00
1-131-1022	APC-7 to GR -874	2.062" x 1.00"	60.00
1-131-1023	APC-7 to GR-900	2.187" x 1.06"	110.00

MINIATURE "CP" PLUGS



Designed to mate with 7-pin and 9-pin miniature tube sockets. Molded of diallyl phthalate dielectric. Built-in cable strain relief. Gold over silver plated contacts.

Cat. No.	Description	Ea. 1-49	50-99	100-249	500-999
1-86-896	7-pin plug	$1.14	$0.956	$0.856	$0.663
1-86-893	9-pin plug	1.30	1.09	.98	.76
1-86-895	7-pin, cap B	1.28	1.07	.96	.742
1-86-897	9-pin, cap B	1.40	1.16	1.04	.807
1-86-894	7-pin, cap C	1.58	1.32	1.19	.92

AMPHENOL CONNECTORS

SUBMINAX® CO-AX CONNECTORS

Continued

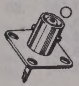
Cat. No. 1-5116-⋆	See Fig.	Ohms Imp.	Type Unit	RG-/U See	Ea. 1-24	25-99	100-499
037875	–	50	Blkhd. jack	(d)	$5.36	$4.39	$3.69
058375	H	50	Recept.*	–	5.45	4.47	3.75
054875	H	95	Recept.*	–	....	....	2.70
057350	H	50	Recept.*	–	....	....	7.34
057375	H	95	Recept.*	–	....	....	7.49
058350	G	50	Recept.**	–	4.11	3.37	2.83
056825	G	75	Recept.**	–	4.12	3.38	2.84
057400	G	95	Recept.**	–	3.79	3.11	2.61
054475	I	50	Adapter, Blkhd.		6.69	5.49	4.61
054525	I	75	Adapter, Blkhd.		....	....	5.41
054550	I	95	Adapter, Blkhd.		....	....	5.78
1-227-911			Crimping tool		19.00	....	....

⋆Include entire Cat. No. when ordering.

BNC SERIES CONNECTORS

BAYONET LOCK COUPLING

Small, low voltage, weatherproof connectors for quick connect-disconnect applications. They are non-constant impedance types for use with cables as indicated under "For RG-/U" heading. The types shown with # are "Improved Series BNC" for 50 ohms constant impedance use to 10,000 mcs. *Cable type. †Right angle. ‡Panel type. **Bulkhead type. #Improved Series BNC. Under **"For RG-/U"** heading: **A** is for RG-55/U, RG-58/U; **B** for RG-55/U, RG-58/U, RG-141/U, RG-142/U, RG-233/U; **C** for RG-59/U, RG-62/U, RG-71/U. In the illustrations solid dot end mates with circle end.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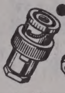
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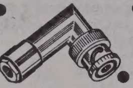
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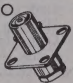
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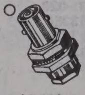
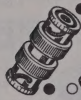

31-206

Cat. No.	MIL Type	Description	For RG-/U	Ea. 1-24	Ea. 25-99	Ea. 100-499	Ea. 500-999
1-31-002	UG-88/U	Plug*	A	$0.76	$0.62	$0.52	$0.45
1-31-018	UG-88B/U	Plug*	A	.99	.81	.68	.59
1-31-202#	UG-88C/U	Plug*	A	.84	.69	.58	.50
1-31-2202	UG-88D/U	Plug*	B	1.34	1.10	.92	.79
1-31-012	UG-260/U	Plug*	C	.87	.71	.60	.52
1-31-021	UG-260A/U	Plug*	C	1.00	.82	.69	.60
1-31-212#	UG-260B/U	Plug*	C	.97	.80	.67	.58
1-31-2212	UG-260C/U	Plug*	C	1.23	1.01	.85	.73
1-31-204#	UG-913/U	Plug†	A	3.67	3.01	2.53	2.18
1-31-850	. . . . .	Plug‡	C	4.23	3.47	2.91	2.51
1-31-2205	UG-89C/U	Jack*	B	$1.23	$1.01	$0.85	$0.73
1-31-015	UG-261/U	Jack*	C	1.58	1.30	1.09	.94
1-31-011	UG-262/U	Jack‡	C	1.73	1.42	1.19	1.03
1-31-206#	UG-909/U	Jack**	A	1.87	1.54	1.29	1.11
1-31-207#	UG-910/U	Jack**	C	1.96	1.61	1.35	1.17
1-31-003	UG-290/U	Recept.**	–	.93	.76	.64	.55
1-31-203	UG-290A/U	Recept.**	–	.97	.80	.67	.58
1-31-236	UG-625B/U	Recept.**	–	.90	.74	.62	.54
1-31-221#	UG-254A/U	Recept.**	–	.76	.62	.52	.45
1-31-102	UG-657/U	Recept.**	–	1.35	1.11	.93	.80
1-31-238	UG-912/U	Recept.‡	–	2.29	1.88	1.58	1.36
1-31-222	UG-1098/U	Recept.†	–	3.18	2.61	2.19	1.89
1-31-218	UG-491A/U	Adapter	–	2.73	2.24	1.88	1.62
1-31-219	UG-914/U	Adapter	–	1.45	1.19	1.00	.86
1-31-220	UG-492A/U	Adapter	–	2.96	2.43	2.04	1.76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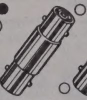
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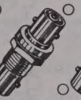
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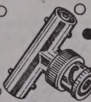
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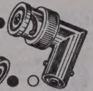
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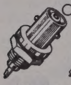
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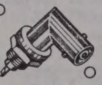

31-222

ASTROPLATE NOTE

Many of the BNC 31-Series Connectors are available with the new non-tarnish, abrasion resistant ASTROPLATE finish per MIL-C 39012. Complete information, prices and delivery will be furnished on request.

Continued in Next Column.

BNC SERIES CONNECTORS

Continued

Cat. No.	MIL Type	Unit Type	For RG-/U	Ea. 1-24	Ea. 25-99	Ea. 100-499	Ea. 500-999
1-31-008	UG-274/U	Tee	–	$2.53	$2.07	$1.74	$1.50
1-31-208	UG-274A/U	Tee	–	2.86	2.35	1.97	1.70
1-31-009	UG-306/U	Adapter†	–	2.38	1.95	1.64	1.42
1-31-759	....	Gnd. lug	–	.20	.17	.14	.12

"QUICK CRIMP" BNC SERIES

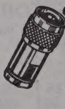
WITH CAPTIVATED® CONTACTS

Upgraded BNC types offering easier, quicker assembly and increased reliability. Critical pre-assembly work has been done, leaving only three basic parts to assemble and crimp. Patented Amphenol Captivated Contacts prevent disconnects caused by recession of cable dielectrics or conductors under stress. Under the **"For RG-/U"** heading: **A** is RG-55/U, RG-55A/U, RG-142/U, RG-223/U; **B** RG-58/U, RG-58A/U, RG-58C/U, RG-141/U; **D** RG-59/U, RG-59A/U, RG-62/U, RG-62A/U, RG-62C/U, RG-140/U.

Cat. No.	Description	For RG-/U	Ea. 1-24	25-99	100-499	500-999
1-31-304	Plug, cable	D	$1.87	$1.54	$1.29	$1.11
1-31-350	Plug, cable	A	3.95	3.24	2.72	2.35
1-31-320	Plug, cable	B	1.31	1.07	.90	.78
1-31-354	Plug, rt. angle	B	6.87	5.63	4.73	....
1-31-356	Jack, cable	B	2.35	1.93	1.62	1.40
1-31-358	Jack, bulkhead	B	3.85	3.16	2.65	....
1-227-350	Crimping tool	–	95.00	....	....	....

N SERIES CONNECTORS

Most popular 50 ohm constant impedance connectors for medium size coaxial cables. Usable up through microwave frequencies with minimum line unbalance or increase in standing wave ratio. Connectors with †† are 70 ohms impedance and will not mate with the 50 ohm types. #Improved Series N types for superior electrical service up to 10,000 mcs. Completely weatherproof. Peak rating 500 volts. *Cable type. †Rt. angle. ‡Panel type. **Bulkhead type. #Improved N type. Under **For RG-/U** heading letters denote: **B** is RG-8/U, RG-9/U, RG-10/U; **J** is RG-8/U, RG-10/U, RG-87A/U; **K** is RG-55/U, RG-58/U; **L** is RG-59/U, RG-62/U, RG-71/U.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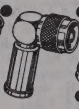
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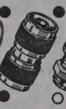
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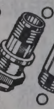
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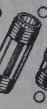
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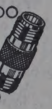
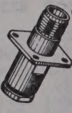

82-101

Cat. No.	MIL Type	Unit Type	For RG-/U	Ea. 1-24	25-99	100-499	
1-82-61	UG-21B/U	Plug*	B	$1.51	$1.24	$1.04	
1-82-202#	UG-21D/U	Plug*	B	1.80	1.48	1.24	
1-82-326	....	Plug†	J	8.33	6.84	5.74	
1-82-835	....	Plug†	B	5.08	4.17	3.50	
1-82-100	UG-57B/U	Adapter	–	2.70	2.22	1.86	
1-82-66	UG-20/U	Adapter**	–	4.89	4.01	3.37	
1-82-101	UG-29B/U	Adapter	–	$2.15	$1.76	$1.48	$1.28
1-82-62	UG-22B/U	Jack‡	B	2.37	1.94	1.63	1.41
1-82-63	UG-23B/U	Jack*	B	1.90	1.56	1.31	1.13
1-82-24	UG-58/U	Recept.‡	–	1.26	1.04	.87	.75
1-82-97	UG-58A/U	Recept.‡	–	1.23	1.01	.85	.73
1-82-106	MX-913/U	Cap/chain	–	.78	.64	.54	.47
1-82-213#	UG-27C/U	L adapter	–	3.63	2.98	2.50	2.16
1-83-1H	UG-106/U	Hood	D	.58	.48	.40	.35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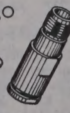
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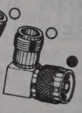
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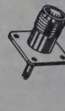
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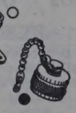

82-106

AMPHENOL CONNECTORS

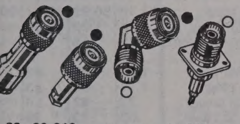
C SERIES CONNECTORS

Designed for 50 ohm coaxial cables but usable with 70 ohm cables when impedance matching is not critical. Cable clamping mechanism provides maximum cable grip and adequate sealing with a min- m of cable indentation. Peak rating 1000 volts. Under **For RG-/U** ding: **A** is RG-8/U, RG-9/U, RG-10/U; **B** is RG-8/U, RG-9A/U; RG-14/U, RG-74/U. *Cable type. †Panel type. #High voltage.

.	MIL Type	Unit Type	For RG-/U	Ea. 1-24	25-99	100-499	500-999
2-530	UG-583A/U	Plug*	A	$2.90	$2.38	$2.00	$1.73
2-532#	UG-628A/U	Plug*	B	3.80	3.12	2.62	2.26
2-533	UG-707A/U	Plug*	C	7.19	5.90	4.95	. . . .
2-504	UG-568/U	Jack†	–	2.40	1.97	1.65	1.42

HN SERIES CONNECTORS

5 KV PEAK RATING

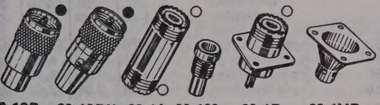


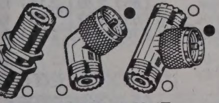
Weatherproof, high voltage connectors of constant impedance for 50 ohm coaxial cables. #Captivated contacts prevent accidental disconnects due to recession of dielectric or conductor caused by essive mechanical or enviromental stresses. *Cable type. †Right le type. ‡Panel type. Under **For RG-/U** heading: **A** is RG-8/U, -9/U, RG-10/U; **F** is RG-54A/U.

.	MIL Type	Unit Type	For RG-/U	Ea. 1-24	25-99	100-499	500-999
2-38	UG-59A/U	Plug*	A	$4.57	$3.75	$3.15	$2.72
2-804	UG-59B/U	Plug*	A	4.05	3.32	2.79	2.41
2-816	. . . .	Plug*	F	5.05	4.14	3.48	3.00
2-814	UG-60B/U	Jack‡	A	4.14	3.39	2.85	. . . .

UHF SERIES CONNECTORS

SMALL SINGLE CONTACT TYPES





ASTROPLATE NOTE

Many of the Series 83 UHF Connectors are available with the new non-tarnish, abrasion-pruf ASTROPLATE finish per MIL-C-39012. Complete information, prices and delivery on request. Low cost, eral purpose connectors of non-constant impedance for use ere line balance or increased standing wave ratio is not imtant. Where impedance matching is necessary use Series N or ies BNC Connectors. *Mica-filled bakelite. #Steatite. (1) With 168 reducing adapter. (2) Captivated contact. (4) Right angle. Reducing. (7) Straight. (8) Tee. Under **RG-/U** heading: **A** is for -8/U, -9/U, -10/U, 11/U, -12/U, -13/U, -63/U, -65/U; **D** is -29/U, -55/U, -58/U; **E** is RG-55/U, -59/U, -62/U, -71/U; **G** is -17/U.

.	MIL Type	Type Unit	For RG-/U	Ea. 1-24	25-99	100-499	500-999
3-1SP	PL-259	Plug*	A	$0.82	$0.51	$0.43	$0.37
3-1SPN	PL-259A	Plug*	A	1.28	1.05	.88	.76
3-750	111/U	Plug (1)	E	1.21	.99	.83	.72
3-1R	SO-239	Recept.*	–	.60	.49	.41	.35
3-1RTY	SO-239	Recept.‡	–	1.03	.85	.71	.61
3-798	SO-239A	Recept.	–	1.54	1.26	1.06	.91
3-1F	363/U	Adapter(7)	–	3.02	2.48	2.08	1.80
3-1J	299/U	Adapter(7)	–	1.23	1.01	.85	.73
3-1AP	646/U	Adapter(4)	–	1.87	1.54	1.29	1.11
3-1T	. . .	Adapter(8)	–	3.35	2.75	2.31	1.99
3-168	176/U	Adapter(6)	E	.22	.18	.15	.13

Continued In Next Column.

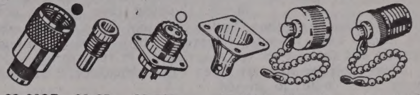
UHF SERIES CONNECTORS

SMALL SGL. CONTACT TYPES CONT'D.

Cat. No.	MIL Type	Type Unit	For RG-/U	Ea. 1-24	25-99	100-499	500-999
1-83-185	175/U	Adapter(6)	D	$0.19	$0.15	$0.15	$0.11
1-83-1H	106/U	Hood	A	.58	.48	.40	.35
1-83-1HP	372/U	Hood	A	.62	.51	.43	.37
1-83-765	177/U	Hood	D	.52	.43	.36	.31

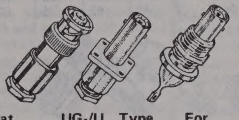
UHF SERIES CONNECTORS

SMALL TWIN CONTACT TYPES



Cat. No.	MIL Type	Type Unit	For RG-/U	Ea. 1-24	25-99	100-499	500-999
1-83-22SP	UG-102/U	Plug*	22	$1.82	$1.49	$1.25	$1.08
1-83-22SP	PL-284	Plug*	22	1.82	1.49	1.25	1.08
1-83-22R	UG-103/U	Recept.*	—	1.50	1.23	1.03	.89
1-83-22R	SO-264	Recept.*	—	1.50	1.23	1.03	.89
1-83-65	. . . . .	Adapt(6)	1/4"	.33	.27	.23	.20
1-83-1H	UG-106/U	Hood	22	.58	.48	.40	.35
1-83-1H	M-360	Hood	22	.58	.48	.40	.35
1-83-1H	49193	Hood	22	.58	.48	.40	.35
1-83-1AC	. . . . . .	Cap/chain	—	.91	.75	.63	.54
1-83-1BC	. . . . . .	Cap/chain	—	1.54	1.26	1.06	.91

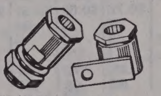
MHV HF CONNECTORS



Small, weatherproof, Teflon insulated coaxial connectors for use up to 50 mcs. Peak voltage rating 5000 volts. Maximum current 5 amps. MHV is similar to but does not mate with the BNC type.

Cat. No.	UG-/U No.	Type Unit	For RG-/U	Ea. 1-24	25-99	100-499	500-999
1-27975	932A	Plug	59, 62, 71	$2.27	$1.86	$1.56	$1.35
1-28175	961A	Recept.	59, 62	5.10	4.18	3.51	. . . .
1-28400	. . . .	Recept.	. . . .	5.87	4.81	4.04	3.49

CABLE TERMINATIONS

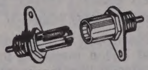


Designed to terminate coax shield without soldering and permitting the inner conductor to extend beyond the termination. Types 309-1050 and 300-1025 mount in a .312" hole. Under the **For RG-/U** heading **A** is RG-59/U, -62/U, -71/U; **B** is RG-56/U, -58/U.

Cat. No.	MIL Type	For RG-/U	Ea. 1-24	25-99	100-499	500-999
1-309-1050	MX-1530/U	A	$0.71	$0.58	$0.49	. . . .
1-309-1025	MX-1684/U	B	.70	.57	.48	.41
1-309-4025	MX-1801/U	A	.64	.52	.44	. . . .

PLUG-IN CONNECTORS

FOR USE WITH SLIDING DRAWER-TYPE CHASSIS

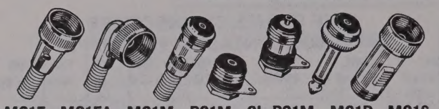


Most commonly used on drawer-type sliding chassis for direct plug-in connections. Slight mis-alignment does not interfere with their operation. Plug and receptacle mount in 5/16" holes. Insulated for 2000 volts. Rexolite dielectric.

Cat. No.	MIL Type	Type Unit	Ea. 1-24	25-99	100-499	500-999
1-2225	UG-1050/U	Plug	$0.96	$0.79	$0.66	$0.57
1-2175	UG-1051/U	Recept.	1.07	.88	.74	.64

For complete, condensed information regarding AMPHENOL Connectors and other products ask for AMPHENOL Catalog AID-1. It will be mailed free on request.

AMPHENOL CONNECTORS



SERIES 75 MIKE CONNECTORS

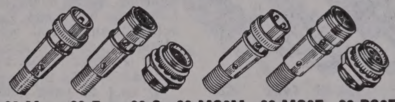
Widely used with 1-conductor coaxial type cables for high impedance connections to microphones, recorders, amplifiers, etc. Machined from brass, chrome plated. Coupling rings provide positive, noise-free connection. Spring cord protectors prolong cable life. Female cable connectors convert to male connectors by unscrewing and sliding back coupling ring. CL-PC1M is spring loaded to insure positive contact. When cable connector is removed shorts input circuit to ground.

STANDARD TYPES FOR ¼" O.D. CABLES

Cat. No.	Connector Description	Ea. 1-49	50-249	250-499	500-999
1-75-MC1F	Female connector	$0.70	$0.60	$0.53	$0.46
1-75-MC1FA	Angled female	1.48	1.27	1.11	.97
1-75-MC1M	Male connector	.48	.42	.36	.32
1-75-PC1M	Male receptacle	.48	.42	.36	.32
1-75-CL-PC1M	Spring loaded recept.	.68	.58	.51	.44
1-75-MC1P	Fone plug adapter	.68	.58	.51	.45
1-75-MC1S	Switch adapter	2.49	2.14	1.87	1.63
1-75-CCC1	Dust cap and chain	.47	.40	.35	.31

MINIATURE TYPES FOR 3/16" O.D. CABLES

Cat. No.	Connector Description	Ea. 1-49	50-249	250-499	500-999
1-75-1	Female connector	$0.70	$0.60	$0.53	$0.46
1-75-2	Male connector	.48	.42	.36	.32
1-75-3	Male receptacle	.48	.42	.36	.32



SERIES 80 MIKE CONNECTORS

SINGLE CONTACT FOR 5/16" O.D. CABLES

*With coupling ring. These types mate with other two connectors not so identified within the same grouping.

Cat. No.	Connector Description	Ea. 1-49	50-249	250-499	500-999
1-80-M*	Male cable plug	$0.76	$0.65	$0.57	$0.50
1-80-F	Female cable plug	.85	.73	.64	.56
1-80-C	Female chassis recept.	.60	.52	.45	.40
1-80-F1*	Female cable plug	.85	.73	.64	.56
1-80-M1	Male cable plug	.80	.68	.60	.52

TWO CONTACT FOR 5/16" O.D. CABLES

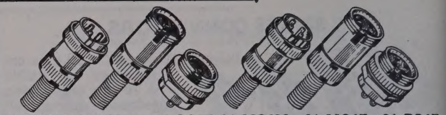
Cat. No.	Connector Description	Ea. 1-49	50-249	250-499	500-999
1-80-MC2M*	Male cable plug	$0.80	$0.68	$0.52	$0.47
1-80-MC2F	Female cable plug	.85	.73	.64	.56
1-80-PC2F	Female chassis recept.	.68	.58	.51	.44
1-80-MC2F1*	Female cable plug	.85	.73	.64	.56
1-80-MC2M1	Male cable plug	.80	.68	.52	.47
1-80-PC2M	Male chassis recept.	.66	.56	.49	.43

TIP-JACK & FEED-THRU

MAX. OPERATING V. 1000

Threaded metal bodies mount in a .25" diameter hole. Molded Nylon insulating inserts. Approved under military specs MS16108 and MIL-STD-242 (Ships). Max. operating temperature 400°F. Overall length **A** .921", **B** 1.031". §Add suffix: -1 red, -2 black, -3 brown, -4 green, -5 orange, -6 white, -7 blue, -8 gray, -9 pink, -10 lt. blue, -11 lt. green, -12 buff, -13 yellow, -14 natural, -15 violet; to indicate color when ordering.

Cat. No.	Description	Ea. 1-49	50-249	250-499	500-999
1-350-29175-§	Tip-jack, turret	$.428	$.358	$.32	$.25
1-350-29200-§	Tip-jack, spade	.428	.358	.32	.25
1-350-50200-§	Feed-thru	.85	.71	.635	.492



91 SERIES MIKE CONNECTORS

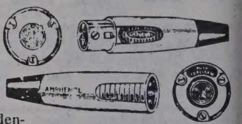
THREE CONTACT FOR .312" O.D. CABLES

*With coupling ring. These types mate with other two connectors not so identified within the same grouping.

Cat. No.	Connector Description	Ea. 1-49	50-249	250-499	500-999
1-91-MC3M*	Male cable plug	$1.11	$0.95	$0.83	$0.73
1-91-MC3F	Female cable plug	1.13	.97	.85	.74
1-91-PC3F	Female chassis recept.	.80	.69	.60	.52
1-91-MC3F1*	Female cable plug	1.18	1.01	.88	.77
1-91-MC3M1	Male cable plug	1.06	.91	.79	.70
1-91-PC3M	Male chassis recept.	.72	.62	.54	.47

FOUR CONTACT FOR 13/32" O.D. CABLES

Cat. No.	Connector Description	Ea. 1-49	50-249	250-499	500-999
1-91-MC4M*	Male cable plug	$1.16	$0.99	$0.87	$0.76
1-91-MC4F	Female cable plug	1.17	1.00	.88	.77
1-91-PC4F	Female chassis recept.	.76	.66	.57	.50
1-91-MC4F1*	Female cable plug	1.23	1.05	.92	.80
1-91-MC4M1	Male cable plug	1.11	.96	.83	.73
1-91-PC4M	Male chassis recept.	.73	.62	.54	.48
1-91-CCC3	Dust cap and chain	.50	.43	.38	.33



QWIK

MIKE CONNECTORS

Positive lock prevents accidental disconnect, releases instantly when button is depressed. Satin finished zinc alloy bodies. Amphenol 1-501 Blue insulation. Bronze contacts gold-plated over silver for indefinite life. Tough Tenite push-buttons. Built-in adjustable cable relief. *With push-button release, mate with others not so identified within the same grouping.

Cat. No.	Connector Description	Ea. 1-49	50-249	250-499	500-999
1-91-853	3-pin male plug*	$1.89	$1.62	$1.41	$1.24
1-91-854	3-pin female plug	2.51	2.16	1.89	1.65
1-91-855	3-pinmale recept.*	1.47	1.26	1.10	.96
1-91-856	3-pin female recept.	3.48	2.99	2.61	2.29
1-91-857	4-pin male plug*	2.02	1.74	1.52	1.33
1-91-858	4-pin female plug	2.85	2.45	2.14	1.87
1-91-859	4-pin male recept.*	1.59	1.37	1.20	1.05
1-91-860	4-pin female recept.	3.75	3.22	2.81	2.46

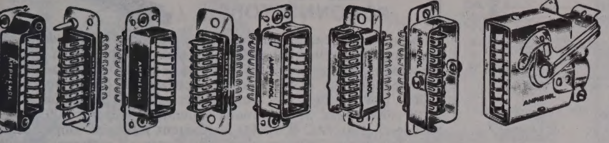
EXCELLITE

AF CONNECTORS

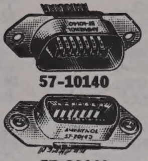
New, lightweight connectors for audio/electronic uses. Push-button latching for fast, positive lock and release. Thermoplastic bodies. Silver plated copper alloy contacts. For .250" to .313" cables. Interchangeable with Cannon XLR, Switchcraft and Amphenol Qwik Series.

Cat. No.	Contacts	Unit Description	Ea. 1-49	50-99	100-249	250-499
1-91-453	3	Male cable plug	$1.20	$1.02	$0.90	$0.78
1-91-454	3	Female cable plug	1.42	1.20	1.07	.92
1-91-455	3	Male panel mount	1.09	.92	.80	.70
1-91-456	3	Female panel mount	1.98	1.69	1.47	1.29
1-91-457	4	Male cable plug	1.33	1.14	.99	.86
1-91-458	4	Female cable plug	1.80	1.50	1.34	1.16
1-91-459	4	Male panel mount	1.30	1.10	.96	.84
1-91-460	4	Female panel mount	1.90	1.62	1.41	1.28
1-91-461	5	Male cable plug	2.12	1.83	1.62	1.40
1-91-462	5	Female cable plug	3.10	2.62	2.32	2.02
1-91-463	5	Male panel mount	1.65	1.43	1.23	1.07
1-91-464	5	Female panel mount	2.80	2.40	1.82	1.71

AMPHENOL

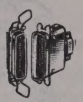


-190 26-159 26-4200 26-4100 26-4201 26-4101 26-4401 26-4301



57-10140

57-20140



57-30360
57-40360

BLUE RIBBON® CONNECTORS

erlocking design of mating Amphenol blue dielectric bodies provides positive polarization in a compact manner. Float-mounted recep-
le allows for possible mis-alignment of mating plug and receptacle. Corrosion resistant, passivated stainless steel mounting plates and
ers. Minimum rating 750 v-dc at sea level, 300 v-dc at 70,000 ft. altitude. *Slightly smaller, mate only with each other. In the other
ups Type 159 and 190 mate, 4100 and 4200 mate, and 4101 and 4201 mate. Others mate as described below.

PIN POLARIZATION

For chassis to chassis use. Polarization by means of guide pins.

n- ts	Cat. No.	Ea. 1-9	10- 49	50- 99	100- 249
ale	....	.....	....	....	....
ale	....	.....	....	....	....
male	1-26-159-16	$2.25	$1.90	$1.54	$1.38
male	1-26-159-24	2.54	2.13	1.73	1.56
male	1-26-159-32	3.20	2.69	2.19	1.97
em.	....	....	....	....	....
em.	....	....	....	....	....
fem.	1-26-190-16	2.86	2.41	1.96	1.76
fem.	1-26-190-24	3.42	2.88	2.34	2.10
fem.	1-26-190-32	4.04	3.39	2.76	2.48

LATCH-LOCK SHELLS

With end cable outlet. Stainless steel shells mate with and lock to 4401 series chassis connectors to the right.

ale	1-26-4301-8P	$5.68	$4.77	$3.87	$3.49
male	1-26-4301-16P	7.12	5.99	4.87	4.38
male	1-26-4301-24P	7.98	6.71	5.44	4.90
male	1-26-4301-32P	8.89	7.48	6.06	5.46
em.	1-26-4301-8S	6.90	5.81	4.71	4.24
fem.	1-26-4301-16S	7.70	6.47	5.25	4.72
fem.	1-26-4301-24S	8.98	7.56	6.14	5.51
fem.	1-26-4301-32S	9.72	8.17	6.64	5.97

BARRIER POLARIZATION

For chassis to chassis use. Polarization by means of molded insert guides.

Cat. No.	Ea. 1-9	10- 49	50- 99	100- 249
1-26-182*	$1.23	$1.04	$0.84	$0.75
1-26-4100-8P	1.12	.94	.76	.69
1-26-4100-16P	2.10	1.77	1.43	1.29
1-26-4100-24P	2.52	2.13	1.73	1.55
1-26-4100-32P	2.94	2.47	2.00	1.80
1-26-183*	1.94	1.62	1.33	1.19
1-26-4200-8S	1.83	1.55	1.26	1.12
1-26-4200-16S	2.67	2.25	1.82	1.63
1-26-4200-24S	3.16	2.66	2.16	1.94
1-26-4200-32S	3.77	3.17	2.58	2.31

LATCH-LOCK SHELLS

Wide side cable outlet. Stainless steel shells mate with and lock to 4401 series chassis connectors to the right.

1-26-4501-8P	$5.68	$4.77	$3.87	$3.49
1-26-4501-16P	7.12	5.99	4.87	4.38
1-26-4501-24P	7.98	6.71	5.44	4.90
1-26-4501-32P	8.89	7.48	6.06	5.46
1-26-4501-8S	6.39	5.37	4.37	3.92
1-26-4501-16S	7.70	6.47	5.25	4.72
1-26-4501-24S	8.69	7.31	5.94	5.33
1-26-4501-32S	9.59	8.07	6.54	5.88

WITH KEYED SHELLS

For chassis to chassis use. Similar to 4100/4200 series with metal shells.

Cat. No.	Ea. 1-9	10- 49	50- 99	100- 249
1-26-4101-8P	$2.20	$1.86	$1.51	$1.36
1-26-4101-16P	3.33	2.81	2.27	2.05
1-26-4101-24P	3.84	3.23	2.63	2.36
1-26-4101-32P	4.41	3.71	3.01	2.70
....	....	....	....	....
1-26-4201-8S	2.54	2.14	1.74	1.56
1-26-4201-16S	3.46	2.92	2.36	2.12
1-26-4201-24S	4.14	3.49	2.83	2.53
1-26-4201-32S	4.80	4.05	3.28	2.95

CHASSIS TYPES

For chassis mounting. Connectors mate with the latch-lock 4301 and 4501 series connectors to the left.

1-26-4401-8P	$3.42	$2.88	$2.34	$2.10
1-26-4401-16P	4.51	3.78	3.07	2.77
1-26-4401-24P	5.07	4.26	3.47	3.11
1-26-4401-32P	5.63	4.74	3.84	3.47
1-26-4401-8S	4.17	3.51	2.84	2.57
1-26-4401-16S	5.10	4.28	3.48	3.13
1-26-4401-24S	5.76	4.84	3.93	3.53
1-26-4401-32S	6.49	5.46	4.43	3.99

MICRO-RIBBON® CONNECTORS

signed for airborne and computer projects. Smooth, easy insertion and extraction action.
e diallyl phthalate inserts. Gold flashed over silver contacts. Shells are cadmium plated
ss. Receptacle shells have float bushings for .020" movement in each direction. Voltage
ng at 5 amps: sea level 700 v-dc, 70,000 ft. altitude 200 v-dc.

RACK & PANEL

For inter-connecting chassis or for plug-in rack panel use. Male connectors mate with female types.

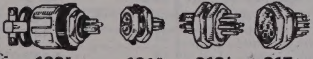
n ts	Cat. No.	Net 1-9	10- 49	50- 99	100- 249
male	1-57-10140	$1.96	$1.64	$1.34	$1.21
male	1-57-10240	2.62	2.19	1.90	1.60
male	1-57-10360	3.00	2.52	2.05	1.84
male	1-57-10500	3.95	3.34	2.70	2.42
fem.	1-57-20140	2.01	1.70	1.37	1.24
fem.	1-57-20240	2.67	2.25	1.83	1.64
fem.	1-57-20360	3.17	2.59	2.10	1.89
fem.	1-57-20500	4.00	3.38	2.73	2.46

CABLE TO CHASSIS

Plugs have end cable entry clamps mate with female chassis connector which has locking device.

Cat. No.	Net 1-9	10- 49	50- 99	100- 249
1-57-30140	$3.76	$3.16	$2.57	$2.32
1-57-30240	4.13	3.48	2.81	2.54
1-57-30360	5.16	4.26	3.44	3.12
1-57-30500	5.64	4.66	3.79	3.41
1-57-40140	2.47	2.09	1.70	1.53
1-57-40240	2.95	2.47	2.01	1.81
1-57-40360	3.18	2.67	2.16	1.94
1-57-40500	4.16	3.50	2.82	2.54

MINIATURE HEX CONNECTORS

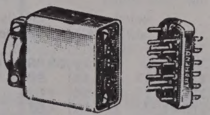


192* 191* 218† 217‡

r interconnections of miniature elec-
nic equipment. Bodies are molded of
llyl phthalate di-
ctric. Gold fin-
ed, silver plated
ntacts will not
nish or corrode,
easily soldered.
ted at 7.5 amps
500 V. *With
x mounting nut.
Vith locking clip.
Vith metal hood
d clamp.

PLUGS Cat. No.	Ea. 1-49	50- 99	Con- tacts	SOCKETS Cat. No.	Ea. 1-49	50- 99
1-126-010*	$0.73	$0.59	5	1-126-011*	$1.16	$0.92
1-126-216†	.78	.62	5	1-126-218†	1.24	.98
1-126-217‡	1.60	1.27	5	1-126-223‡	2.07	1.64
1-126-191*	.86	.68	7	1-126-192*	1.47	1.16
1-126-197†	.92	.73	7	1-126-198†	1.55	1.23
1-126-195‡	1.76	1.40	7	1-126-196‡	2.38	1.88
1-126-012*	.99	.79	9	1-126-013*	1.82	1.44
1-126-219†	1.06	.83	9	1-126-221†	1.90	1.50
1-126-220‡	1.90	1.50	9	1-126-222‡	2.72	2.16

RECTANGULAR CONNECTORS



For rack and panel use. Inserts are chassis types, will mate with cover types. Insulation mica-filled phenolic. Gold flashed contacts. *AWG wire sizes. †Heavy-duty type. Cable-clamp housings made of aluminum. Rated 900 v-rms at sea level.

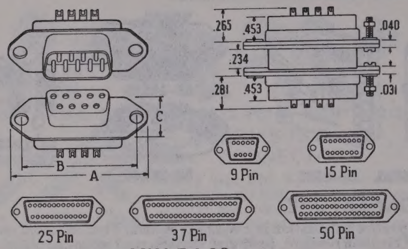
INSERT ONLY

Contacts* #16	#20	Cat. No.	Ea. 1-49	50- 99	100- 249
2	9	1-126-804(m)	$1.03	$0.81	$0.67
2	9	1-126-805(f)	1.06	.84	.70
3	12	1-126-151(m)	1.36	1.07	.88
3	12	1-126-150(f)	1.03	.81	.67
4	16	1-126-806(m)	1.63	1.28	1.06
4	16	1-126-807(f)	1.30	1.02	.85
20†	--	1-126-813(m)	2.96	2.34	1.93

WITH COVER

2	9	1-126-809(m)	$1.68	$1.32	$1.10
2	9	1-126-808(f)	1.72	1.36	1.13
3	12	1-126-152(m)	2.63	2.08	1.72
3	12	1-126-153(f)	2.05	1.62	1.35
4	16	1-126-811(m)	2.61	2.06	1.71
4	16	1-126-810(f)	2.28	1.80	1.49

AMPHENOL



MIN-RAC®
MINIATURE SERIES CONNECTORS

Shells are cadmium with gold iridite finish. Contacts are gold over copper-plated brass, current rating 7.5 amps. Temperature range-55°C to +125°C. ⋆ When ordering give complete Cat. No. i.e., 1-17-80090-16.

WITH CAPTIVATED CONTACTS

Dielectric is glass-filled nylon. Solder contacts take up to #20 AWG wire. Intermateable and interchangeable with the encapsulated types listed below. Voltage rating 500 v-rms at sea level, 125 v-rms at 70,000 feet elevation. †Socket Term. ‡Pin term.

RECEPTACLES†				PLUGS‡		
Cat. No. 1-17-⋆	Ea. 1-9	10-49	Con-tacts	Cat. No. 1-17-⋆	Ea. 1-9	10-49
81090-16	$1.65	$1.49	9	91090-16	$1.15	$1.04
81150-16	2.41	2.18	15	91150-16	1.62	1.47
81250-16	3.66	3.32	25	91250-16	2.34	2.12
81370-16	5.15	4.64	37	91370-16	3.20	2.90
81500-16	6.60	6.00	50	91500-16	4.15	3.76

WITH ENCAPSULATED CONTACTS

Dielectric Zytel 101. Crimp contacts take up to #20 AWG wire. Voltage rating 500 v-rms at sea level, 150 v-rms at 90,000 feet.

Cat. No. 1-17-⋆	Ea. 1-9	10-49	Con-tacts	Cat. No. 1-17-⋆	Ea. 1-9	10-49
11090-1(390)	$1.75	$1.59	9	21090-1(390)	$1.29	$1.17
11150-1(390)	2.48	2.25	15	21150-1(390)	1.76	1.59
11250-1(390)	3.63	3.28	25	21250-1(390)	2.42	2.19
11370-1(390)	5.29	4.70	37	21370-1(390)	3.36	3.04
11500-1(390)	6.63	6.00	50	21500-1(390)	4.24	3.84

CABLE HOUSINGS

Used to adapt connector for cable to panel or cable to cable applications. Attaches by 2 screws. In clear chromate finish.

Cat. No.	Con-tacts	Ea. 1-9	10-49
1-17-310-01	9	$1.13	$0.95
1-17-311-01	15	1.18	.99
1-17-312-01	25	1.24	1.02
1-17-313-01	37	1.28	1.07
1-17-314-01	50	1.31	1.09

Note: The MIN-RAC 17® line of miniature connectors is also available in the original Pike-Home Line, Hard Dielectric Line, and a High Density Line. More information will be mailed on request.

LATCHING DEVICES

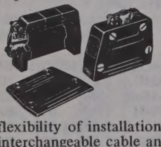
Used to hold connectors in mated position regardless of vibration or shock. Clear chromate finish. **For 9, 15, 25 & 37 pin types.

Cat. No.	For Pins	Ea. 1-9	10-49
1-17-529	**	$0.65	$0.59
1-17-770	50	.65	.59

DIMENSIONS

Pins	A	B	C
9	1.239"	.984"	.515"
15	1.567"	1.312"	.515"
25	2.114"	1.852"	.515"
37	2.754"	2.500"	.515"
50	2.661"	2.406"	.626"

CONNECTOR BACK SHELLS



These versatile connector back shells offer a combination of features that are exclusive with Amphenol. In addition to protecting the connector and securing its cable, their unique design simplifies assembly procedures and provides greater flexibility of installation. All have a removeable side cover, and an interchangeable cable and removable insert. The back shells are available in sizes to fit all 17 Series miniature connectors. Constructed of glassfilled nylon, with cable clamp made from cadmium plated steel.

Con-tacts	Cat. No.	Net 1-9	10-49	50-99	100-249	250-499
9	1-17-1370	$1.14	$1.02	$0.85	$0.68	$0.63
15	1-17-1371	1.16	1.05	.87	.70	.64
25	1-17-1372	1.32	1.18	.99	.79	.72
37	1-17-1373	1.36	1.23	1.02	.82	.75
50	1-17-1374	1.51	1.36	1.14	.91	.83

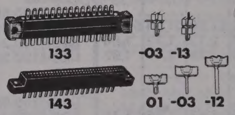
225 SERIES PC CONNECTORS

Amphenol 225 Series printed circuit connectors have solder eyelet terminations, bifurcated bellows contacts with plating of .00002" minimum gold ovet cooper with single or double-sided readout add to the flexibility of this line. Contacts are on .156" centers with .140" row spacing. The solder eyelet tails will accept up to two #18' AWG wires. Specifications: Operating Voltage: 600 VAC @ sea level, 150 VAC @ 70000 ft., Current Rating: 5 amps, Insulation Resistance: 5000 megohms min., Contact Resistance: 30 millivolts max., Board thickness: .054" to .071".

Con-tacts	Cat. No.	Net 1-49	50-99	100-249	250-499
6	1-225-20621-401(117)	$1.31	$1.10	$0.92	$0.82
10	1-225-21021-401(117)	1.73	1.44	1.21	1.08
15	1-225-21521-401(117)	2.06	1.72	1.45	1.29
18	1-225-21821-401(117)	2.39	2.00	1.68	1.50
22	1-225-22221-401(117)	2.58	2.16	1.81	1.61
25	1-225-22521-401(117)	3.54	2.96	2.48	2.21
28	1-225-22821-401(117)	3.95	3.31	2.77	2.47
36	1-225-23621-401(117)	4.60	3.85	3.23	2.87
43	1-225-24321-401(117)	5.28	4.42	3.71	3.30

Available in Dip Solder and Wire-Wrap terminations.

PRINTED CIRCUIT CONNECTORS

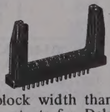


For printed circuits. Series 143 accepts standard .055" to .073" circuit boards with .156" spacing between adjacent contacts. Series 133 mates with 143 Series. Mounts to printed circuit boards. Average width: .350", height: .458", lengths: 6-con.: 1.785"; 10-con.: 2.45"; 15-con.: 3.231"; 18-con.: 3.7"; 22-con.: 4.325. All are (117) deviation. Add (117) to end of Cat. No. i.e. 1-133-006-03(117)

Con-tacts	Cat. 1-*	Net 1-49	50-99	Cat. 1-*	Net 1-49	50-99
6	133-006-03	$1.50	$1.25	143-006-01	$0.79	$0.66
10	133-010-03	1.21	1.01	143-010-01	.83	.70
12	133-012-03	1.50	1.25	143-012-01	.92	.77
15	133-015-03	1.66	1.39	143-015-01	1.31	1.10
18	133-018-03	1.71	1.43	143-018-01	1.25	1.04
22	133-022-03	1.87	1.57	143-022-01	1.50	1.25
6	133-006-13	1.56	1.31	143-006-03	.79	.66
10	133-010-13	1.35	1.13	143-010-03	.83	.70
12	133-012-13	1.62	1.36	143-012-03	.92	.77
15	133-015-13	1.87	1.57	143-015-03	1.04	.87
18	133-018-13	1.91	1.60	143-018-03	1.25	1.04
22	133-022-13	2.18	1.83	143-022-03	1.50	1.25
6	....	....	....	143-006-12	.89	.75
10	....	....	....	143-010-12	.94	.78
12	....	....	....	143-012-12	1.02	.85
15	....	....	....	143-015-12	1.46	1.22
18	....	....	....	143-018-12	1.41	1.18
22	....	....	....	143-022-12	1.77	1.48

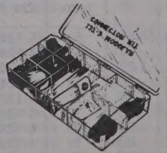
*Include complete Cat. No. i.e. 1-133-006-03(117).

CARD GUIDE CONNECTORS



Has card guides which extend 1-3/8" above main body of connector. These integral card guides provide positive alignment in blind spot installations and prevent board rocking. Hsa .1" more block width than standard 143 line. Available in 15, 18 and 22 contacts for Delrin™ keys. This permits keying without loss of contacts. Dimensions: Height: 1.817", Width: .478", Length: (15 con.) 3.191", (22 con.) 4.279".

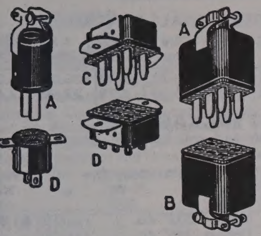
Con-tacts	Cat. No.	Net 1-49	50-99	100-249
15	1-143-015-01(110)	$2.31	$1.93	$1.62
22	1-143-022-01(110)	2.93	2.45	2.06
15	1-143-015-03(110)	2.31	1.93	1.62
22	1-143-022-03(110)	2.93	2.45	2.06



MODULAR INTEGRAL CONNECTOR KIT

Kit includes 3 plug shells, 3 receptacle shells, 6 back plates, 3 each of all 5 modular types, 10 different types of contacts and necessary hardware. Prices available on request.

CINCH-JONES CONNECTORS



SERIES 300 CABLE CONNECTORS

Polarized to prevent mis-mating. Bodies molded from black Bakelite. Male plug prongs are .156" x .046" brass. Phosphor bronze "knife-switch" type socket contacts. 2-contact plugs are round, all others rectangular. Electrical ratings are based on a continuously mated condition. Rated voltage is one-third of breakdown voltage.

Rated voltage . . . . 730 V-RMS
Contact resistance . . . . .016 Ohms Max.
Current rating:
2-12 contacts . . . . 7.5 Amps.
15-24 contacts . . . . 4.5 Amps.

MALE CABLE. Fig. A.

Cat. No.	Contacts	Net 1-49	25-99	100-249
14-P-302-CCT	2	$0.56	$0.48	$0.38
14-P-303-CCT	3	.63	.50	.41
14-P-304-CCT	4	.66	.54	.43
14-P-306-CCT	6	.75	.63	.48
14-P-308-CCT	8	.81	.68	.53
14-P-310-CCT	10	.88	.75	.61
14-P-312-CCT	12	.97	.81	.65
14-P-315-CCT	15	1.28	1.08	.85
14-P-318-CCT	18	1.50	1.25	1.01
14-P-321-CCT	21	1.80	1.50	1.19
14-P-324-CCT	24	2.10	1.76	1.41

FEMALE CABLE. Fig. B.

14-S-302-CCT	2	.60	.48	.39
14-S-303-CCT	3	.64	.51	.42
14-S-304-CCT	4	.68	.56	.44
14-S-306-CCT	6	.78	.65	.50
14-S-308-CCT	8	.86	.72	.60
14-S-310-CCT	10	1.00	.82	.66
14-S-312-CCT	12	1.11	.91	.74
14-S-315-CCT	15	1.44	1.19	.93
14-S-318-CCT	18	1.61	1.35	1.08
14-S-321-CCT	21	1.92	1.60	1.27
14-S-324-CCT	24	2.23	1.85	1.48

MALE CHASSIS. Fig. C.

14-P-302-AB	2	.27	.24	.20
14-P-303-AB	3	.30	.26	.22
14-P-304-AB	4	.35	.29	.24
14-P-306-AB	6	.43	.37	.28
14-P-308-AB	8	.48	.41	.34
14-P-310-AB	10	.54	.46	.38
14-P-312-AB	12	.63	.50	.41
14-P-315-AB	15	.83	.69	.54

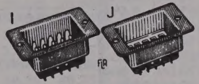
Continued In Next Column

Fig. C. Cont'd.

Cat. No.	Contacts	Net 1-24	25-99	100-249
14-P-318-AB	18	$1.01	$0.83	$0.67
14-P-321-AB	21	1.25	1.05	.83
14-P-324-AB	24	1.52	1.26	1.02

FEMALE CHASSIS. Fig. D.

14-S-302-AB	2	.29	.25	.21
14-S-303-AB	3	.34	.27	.23
14-S-304-AB	4	.37	.30	.25
14-S-306-AB	6	.45	.39	.30
14-S-308-AB	8	.55	.46	.38
14-S-310-AB	10	.65	.54	.43
14-S-312-AB	12	.76	.65	.50
14-S-315-AB	15	.98	.81	.65
14-S-318-AB	18	1.11	.92	.75
14-S-321-AB	21	1.39	1.14	.90
14-S-324-AB	24	1.63	1.38	1.08

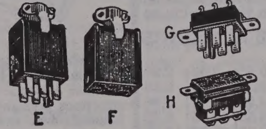


RECESSED MALE. Fig. I.

Cat. No.	Contacts	Net 1-24	25-99	100-249
14-P-302-DB	2	$0.68	$0.56	$0.44
14-P-303-DB	3	.68	.56	.44
14-P-304-DB	4	.72	.61	.47
14-P-306-DB	6	.80	.67	.53
14-P-308-DB	8	.87	.72	.59
14-P-312-DB	12	1.01	.83	.66
14-P-315-DB	15	1.22	1.03	.81
14-P-318-DB	18	1.46	1.22	.99
14-P-321-DB	21	1.75	1.46	1.16
14-P-324-DB	24	2.04	1.71	1.37

RECESSED FEMALE. Fig. J.

14-S-302-DB	2	.70	.46	.60
14-S-303-DB	3	.69	.46	.60
14-S-304-DB	4	.74	.48	.63
14-S-306-DB	6	.83	.54	.70
14-S-308-DB	8	.91	.63	.78
14-S-312-DB	12	1.13	.76	.97
14-S-315-DB	15	1.37	.89	1.13
14-S-318-DB	18	1.56	1.06	1.30
14-S-321-DB	21	1.88	1.24	1.55
14-S-324-DB	24	2.17	1.46	1.82



SERIES 400 CABLE CONNECTORS

With round polarizing pin to prevent mis-mating. Bodies molded of black Bakelite. Male plug prongs are .250" x .062". Phosphor bronze "knife-switch" type socket contacts engage both sides of the flat plug contacts. Electrical ratings based on a continuously mated condition. Rated voltage is one-third of breakdown voltage.

Continued In Next Column

400 SERIES Cont'd.

on a continuously mated condition. Rated voltage is one-third of breakdown voltage.

Rated Voltage . . . . 1200 V-RMS
Rated Current . . . . 15 Amps.
Average contact resistance . . . .001 Ohms

MALE CABLE. Fig. E.

Cat. No.	Contacts	Net 1-49	50-99	100-249
14-P-402-CCT	2	$1.13	$0.93	$0.75
14-P-404-CCT	4	1.29	1.06	.88
14-P-406-CCT	6	1.48	1.24	1.00
14-P-408-CCT	8	1.63	1.37	1.10
14-P-410-CCT	10	1.89	1.58	1.26

FEMALE CABLE. Fig. F.

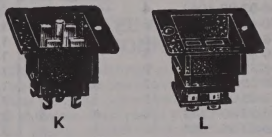
14-S-402-CCT	2	1.28	1.07	.85
14-S-404-CCT	4	1.53	1.28	1.02
14-S-406-CCT	6	1.79	1.48	1.18
14-S-408-CCT	8	2.03	1.69	1.34
14-S-410-CCT	10	2.28	1.91	1.55

MALE CHASSIS. Fig. G.

14-P-402-AB	2	.68	.57	.45
14-P-404-AB	4	.84	.69	.54
14-P-406-AB	6	.98	.83	.66
14-P-408-AB	8	1.13	.93	.75
14-P-410-AB	10	1.28	1.08	.86

FEMALE CHASSIS. Fig. H.

14-S-402-AB	2	.79	.66	.51
14-S-404-AB	4	1.02	.85	.68
14-S-406-AB	6	1.25	1.06	.84
14-S-408-AB	8	1.48	1.23	.99
14-S-410-AB	10	1.70	1.42	1.13



RECESSED MALE. Fig. K.

Cat. No.	Contacts	Net 1-49	50-99	100-249
14-P-402-DB	2	$0.90	$0.75	$0.61
14-P-404-DB	4	1.10	.91	.72
14-P-406-DB	6	1.29	1.08	.86
14-P-410-DB	10	1.67	1.40	1.12

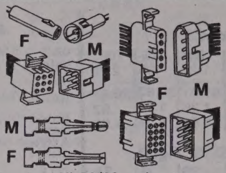
RECESSED FEMALE. Fig. L.

14-S-402-DB	2	1.02	.85	.68
14-S-404-DB	4	1.29	1.08	.86
14-S-406-DB	6	1.56	1.31	1.06
14-S-408-DB	8	1.84	1.53	1.22
14-S-410-DB	10	2.10	1.75	1.41

Additional pin combinations of these terminals are also available. For complete information ask for a Cinch Catalog.

WALDOM/MOLEX CONNECTORS

MINIATURE NYLON CONNECTORS



For use in business machines, home entertainment, appliance, communications, measurement, and instrumentation. Housings are Nylon, and most have integral molded mounting ears for panel mounting. The .062" diameter pin terminals are made of .010" 70/30 spring tempered brass and are tin plated.

MINIATURE NYLON PLUG HOUSINGS

Accept .062" pin terminals.

Cat. No.	No of Ckts.	Amps/ Ckts.	Pkg. Qty.	Pkg. Net	100-499	500-999	1000 Up
40-03-06-2011	1	5	10	$0.95	$6.55	$4.55	$3.50
40-03-06-2031	3	5*	10	1.65	11.05	8.15	5.85
40-03-06-2041	4	5*	10	3.65	24.60	18.30	12.70
40-03-06-2054	5	5*	5	1.20	16.30	12.10	8.75
40-03-06-2062	6	5*	5	1.15	15.70	11.40	8.55
40-02-06-2081	8	5	5	.95	13.35	9.30	7.25
40-03-06-2091	9	5*	5	1.25	16.90	12.10	9.20
40-03-06-2121	12	5*	5	1.30	17.60	13.00	9.65
40-03-06-2151	15	5*	5	2.10	28.60	20.00	15.50
40-03-06-2241	24	4*	5	3.15	42.40	29.50	22.85
40-03-06-2361	36	4*	5	3.55	48.00	33.30	25.70

STANDARD NYLON PLUG HOUSINGS

Accept .093" pin terminals.

40-03-09-2011	1	12	10	.95	6.45	4.45	3.45
40-03-09-2021	2	12*	10	1.90	12.50	9.40	6.50
40-03-09-2031	3	12*	10	1.60	10.95	7.60	5.85
40-03-09-2041	4	9*	10	2.25	15.30	10.60	8.15
40-03-09-2052	5	9	5	1.30	17.90	12.55	9.75
40-03-09-2061	6	9*	5	1.45	19.70	13.10	10.05
40-03-09-2091	9	9*	5	1.55	21.10	14.60	11.30
40-03-09-2121	12	7.5	5	1.60	21.45	14.95	11.60
40-03-09-2151	15	7.5	5	2.45	33.10	22.90	17.70

*With integrally molded mounting ears.

MINIATURE NYLON RECEPTACLE HOUSINGS

Accept .062" pin terminals, with mounting ears and holding tabs.

40-03-06-1011	1	5†	10	.85	5.65	3.90	3.00
40-03-06-1031	3	5	10	1.85	12.40	9.15	6.75
40-03-06-1041	4	5	10	3.60	24.30	18.30	12.50
40-03-06-1055	5	5	5	1.55	21.00	15.35	11.25
40-03-06-1061	6	5	5	1.35	18.25	12.85	9.90
40-03-06-1081	8	5	5	1.20	16.40	11.40	8.85
40-03-06-1091	9	5	5	1.40	19.30	13.70	10.50
40-03-06-1121	12	5	5	1.45	20.20	14.70	11.05
40-03-06-1151	15	5	5	2.40	32.60	22.70	17.75
40-03-06-1241	24	4	5	3.30	44.50	30.90	24.00
40-03-06-1361	36	4	5	3.70	50.10	34.70	26.80

STANDARD NYLON RECEPTACLE HOUSINGS

Accept .093" pin terminals.

40-03-09-1011	1	12†	10	.80	5.55	3.85	2.95
40-03-09-1021	2	12	10	1.90	12.70	9.45	6.55
40-03-09-1031	3	12	10	1.65	11.05	7.65	5.95
40-03-09-1041	4	9	10	2.30	15.60	10.80	8.35
40-03-09-1052	5	9†	5	1.65	22.70	16.30	12.30
40-03-09-1061	6	9	5	1.45	19.60	13.00	9.80
40-03-09-1091	9	9	5	1.65	21.90	14.80	11.50
40-03-09-1121	12	7.5	5	1.75	24.00	16.70	12.95
40-03-09-1151	15	7.5	5	2.80	37.55	26.00	20.00

†With holding tabs only.

CONTACT TERMINALS FOR NYLON HOUSINGS

Spring tempered tin-plated brass .093" dia. types fit standard housings; .062" dia. types (*) fit miniature housings. Std. Pkg. 100. Style C in table below is for crimp, S for solder, PC for printed circuit and BC for bead chain.

Waldom No. Male	Female	Style	Wire Size	Net 100	1K-3999	4000-11999
02-09-2103	02-09-1103	C	14-18	$4.00	$25.30	$18.75
02-09-2118	02-09-1118	C	18-24	4.00	25.30	18.75
02-09-2143	02-09-1143	C	22-30	4.00	25.30	18.75

Waldom No. Male	Female	Style	Wire Size	Net 100	1K-4999	5000-9999
02-09-2133	02-09-1133	PC	....	$3.10	$21.45	$16.50
R-93-12	....	BC	....	1.80	10.30	7.00
....	M-93-102	BC	....	1.80	10.40	7.05
R-93-31	....	BC	....	1.80	10.45	7.20
....	M-118-95A	BC	....	1.85	10.80	7.45
R-62-3	....	BC*	....	1.80	10.70	7.40
R-62-4	....	BC*	....	1.85	10.95	7.70
R-62-5	....	BC*	....	1.80	10.70	6.65

Continued in Next Column

CONTACT TERMINALS CONT'D.

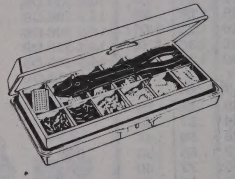
Waldom No. Male	Female	Style	Wire Size	Net 100	4 K-7999	8000-Up
....	02-08-1101	C*	16-28	$4.10	$26.00	$19.30
....	02-05-1105	C*	22-30	3.75	23.50	17.45

PRT PACKAGES

Packages complete, female and male housings, female and male terminals.

Package Cat. No.	No. Ckts.	Pkg. Qty.		O'All Body Size H.	W.	L.	Pkg. Net
40-1625-1PRT	1	5	Male	.203" dia.		.750"	$1.30
	1	5	Female	.296" dia.		.781"	
40-1625-3PRT	3	3	Male	.281"	.578"	.750"	1.75
	3	3	Female	.203"	.484"	.781"	
40-1625-4PRT	4	3	Male	.296"	.734"	.750"	2.90
	4	3	Female	.203"	.625"	.781"	
40-1625-5PRT	5	3	Male	.296"	.875"	.750"	2.85
	5	3	Female	.203"	.781"	.781"	
40-1625-6PRT	6	3	Male	.578"	.453"	.750"	3.05
	6	3	Female	.484"	.343"	.781"	
40-1649-8PRT	8	2	Male	.312"	1.593"	.750"	2.25
	8	2	Female	.220"	1.500"	.781"	
40-1625-9PRT	9	2	Male	.578"	.578"	.750"	2.55
	9	2	Female	.484"	.484"	.781"	
40-1625-12PRT	12	2	Male	.578"	.718"	.750"	3.10
	12	2	Female	.484"	.625"	.781"	
40-1625-15PRT	15	2	Male	.593"	.859"	.750"	4.35
	15	2	Female	.484"	.765"	.781"	
40-1772-36PRT	36	1	Male	.812"	1.640"	.750"	4.55
	36	1	Female	.687"	1.515"	.781"	
40-HT-1921	Crimping tool for .062" pins						5.95

DESIGNER KIT



This light-weight unbreakable kit closes with a snap-lock to avoid spoils and mix-ups. Each Kit contains a prototype hand crimping tool, specially balanced & weighted for ease of poeration. Machined from hardened-steel, this tool provides excellent, uniform crimps every time. It also cuts and strips wire. Each kit also contains a special terminal ejector tool, and detailed crimping instructions permanently affixed and mar-proof. Contains parts to assemble male and female connector housings from single-circuit to 36-circuit complete connectors. Total of 56 connectors.

40-WM-72 Designer Kit **Net $29.95**

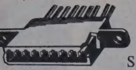
Waldom also produces a Designer Kit in the standard series. Similarly it has all the elements and tools necessary to make up standard connectors in all sizes. Single circuit to 15. Total of 45 complete connectors.

40-WM-50 Designer Kit **Net $24.95**

CRIMPING TOOLS

Cat. No.	Description	Net Ea.
40-HT1919	.098" Prototype hand tool for prototype use	$5.95
40-HT-1921	.062" Prototype hand tool for prototype use	5.95
40-HTR-1031-C	.093" Production hand tool with ratchet	65.00
40-HTR-2262	.062" Production hand tool with ratchet	75.00
40-HT-2038	.093" Deluxe ejuctor tool for extracting pins	6.70
40-HT-1010-2B2	. . . Replacement tip for HT-2038	2.50
40-HT-2285	.062" Deluxe ejector tool for extracting pins	6.70
40-HT-1672-3	. . . Replacement tip for HT-2285	2.50
40-HT-2054	.093" Econo-extractor tool for extracting contacts	2.25
40-HT-2023	.062" Econo-extractor tool for extracting contacts	2.25
40-HT-1353	.093" Insertion tool for inserting contacts	7.50
40-HT-1807	.062" Insertion tool for inserting contacts	7.50

WALDOM/MOLEX CONNECTORS



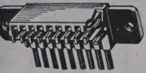
PC STRAIGHT-ON EDGE CONNECTORS

Straight-on edge connectors are available in 6, 9, 12, 15, 18, 21, 22 and 24 circuit configura- ons. Bifurcated terminals provide a solid contact and excellent eliability. Can slip the connector on the off, time after time, with- ut any damage to the printed circuit. Use of polarizing key, when ecessary, guarantees positive polarity. With or without mounting ange. A indicates end to end contact length, B indicates mounting enters for connectors with mounting ears. Height is .312".

at. o.	No. of Ckts.	A	B	Std. Pkg.	Per Pkg.	100- 499/C	500- Up/C
0-09-01-1061	6	.966	.....	5	$1.75	$29.55	$21.85
0-09-01-2061	6	.966	1.392	5	1.75	29.55	21.85
0-09-01-1091	9	1.434	.....	5	1.85	30.40	22.50
0-09-01-2091	9	1.434	1.860	5	1.85	30.40	22.50
0-09-01-1121	12	1.902	.....	5	1.85	31.20	28.15
0-09-01-2121	12	1.902	2.328	5	1.85	31.20	28.15
0-09-01-1151	15	2.370	.....	5	1.90	32.10	23.70
0-09-01-2151	15	2.370	2.796	5	1.90	32.10	23.70
0-09-01-1181	18	2.838	.....	5	1.95	33.00	24.40
0-09-01-2181	18	2.838	3.264	5	1.95	33.00	24.40
0-09-01-1211	21	3.306	.....	5	2.00	33.80	25.05
0-09-01-2211	21	3.306	3.732	5	2.00	33.80	25.05
0-09-01-1221	22	3.462	.....	5	2.05	34.10	25.25
0-09-01-2221	22	3.462	3.888	5	2.05	34.10	25.25
0-09-01-1241	24	3.774	.....	5	2.05	34.30	25.40
0-09-01-2241	24	3.774	4.200	5	2.05	34.30	25.40
0-15-040215	Polarizing Key			10	.65	5.05	3.95

TERMINALS

at. o.	Wire Range	Std. Pkg.	Per Pkg.	2500- 4999/M	5000- 9999/M	10000- Up/M
0-08-01-0102	18-24	100	$4.70	$30.30	$22.75	$18.00
0-08-01-0108	24-30	100	4.70	30.30	22.75	18.00



PC RIGHT ANGLE EDGE CONNECTORS

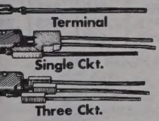
Right angle edge connectors are available in 15, 18, 21, and 22 circuit configurations and offer all the advantages of the "straight- n" series plus the added feature of mounting the printed circuit oard at a right angle, requiring minimum space. A indicates end end contact length, B indicates mounting centers. Height is .593".

at. o.	No. of Ckts.	A	B*	Std. Pkg.	Per Pkg.	100- 499/C	500- Up/C
)-09-02-2151	15	2.286	2.876	5	$2.80	$47.80	$35.40
)-09-02-2181	18	2.754	3.344	5	2.90	48.60	36.05
)-09-02-2211	21	3.222	3.812	5	3.00	49.40	36.60
)-09-02-2221	22	3.378	3.968	5	3.05	49.60	36.70

Also without mounting ears, call 288-2600 for information.

TERMINALS

at. o.	Wire Range	Std. Pkg.	Per Pkg.	2500- 4999/M	5000- 9999/M	10000- Up/M
)-08-30-0102	18-24	100	$5.65	$36.60	$27.50	$21.75
)-08-30-0104	24-30	100	5.65	36.60	27.50	21.75

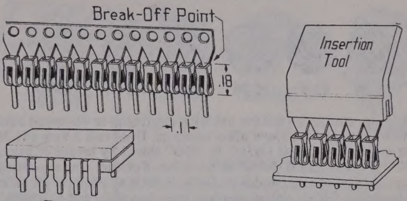


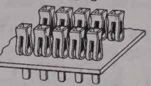
CONNECTORS & TERMINALS FOR MICRO SWITCHES

Waldom/Molex single and three-circuit series nylon connectors for "micro-type switches". Both series of connectors offer low cost, and especially the three circuit, a fool proof method of making ick connections on your "micro" type switches. The housings cept female terminal type No. 05-06-0302 for 22-14 wire range 05-06-0403 for 30-22 wire range, which fit a standard 3/16" le tab .020" thick. These female quick disconnect terminals are stly different than the conventional type female quick discon- cts. The insertion force is much lower and smoother. Therefore will not force the switch out of proper adjustment. The single cuit portion is a unique feature of the three-circuit micro switch nnector. It is purposely "sprung" to allow easy connections to all cro switch mfgs. as their tab locations do vary slightly. The sin- circuit micro switch connector fits any standard 3/16" .020 itch male tab. Both the nylon connectors and the terminal are L. recognized at 10 amps. Recommended for use with Micro- itches.

t. .	Description	Std. Pkg.	Per Pkg.	100- 499/C
-06-02-3011	Single Ckt. Housing	10	$0.80	$5.45
-06-02-3031	Three Ckt. Housing	5	1.25	17.30

t. .	Description	Wire Range	Std. Pkg.	Per Pkg.	1500- 5999/M
-05-06-0302	Terminals	22-14	100	$5.10	$33.00
-05-06-0403	Terminals	30-22	100	5.10	33.00





WALDOM SOLDERCON I-C TERMINAL SOCKET

Available in per-cut strips to fit exact I-C requirements. Soldercons provide excellent electrical contact and sturdy mechanical support. Their use speeds assembly, testing and servicing, and gives new flexibility to P-C assembly. Soldercons are 70/30 spring tempered tin-plated brass, .010" thick. Height above board .180". Hole required .032"/.030" dia. Minimum spacing .100" on centers per row, .200" row spacing. Insertion force 1 oz. min. per terminal. Less size range .007"/.001" x .018"/.030".

CONTINUOUS LENGTH REELS. PRICE PER 1000 TERMINALS

Cat. No.	2M- 9M	10M- 24M	25M- 49M	50M- 74M	75M- Up
40-05-30-001	$12.75	$9.10	$6.67	$5.63	$4.94

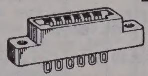
IN PRECUT STRIPS. 50 STRIPS PER PKG.

Cat. No.	No. Ter.	Pkg. 1-5	6- 28	29- 71	72- 142	143- 2130	2131- Up
40-05-30-0007	7	$5.53	$4.81	$3.54	$2.68	$2.32	$2.08
40-05-30-0008	8	5.87	5.10	4.04	3.07	2.65	2.38
40-05-30-0010	10	7.91	6.88	5.05	3.84	3.32	2.97
40-05-30-0012	12	9.49	8.25	6.06	4.60	3.98	3.56
40-05-30-0014	14	11.07	9.63	7.07	5.37	4.64	4.16

40-HT-2369-1	7-8 Terminal insertion/break-off tool	.90
40-HT-2369-2	10-12 Terminal insertion/break-off tool	1.15
40-HT-2369-3	14-18 Terminal insertion/break-off tool	1.25

Note: Nylon insulators available, call 288-2600 for information.

CINCH



PRINTED CIRCUIT EDGE CONNECTORS

Designed for minimum printed circuit card wear, low insertion force and positive contact with the printed circuit board. Insulation is glass-filled diallyl phthalate. Gold plated phosphor bronze contacts are bifurcated for greater reliability where vibration or printed circuit irregularities would otherwise cause trouble. Units listed below have a double row of contacts and will accept either single or double side printed circuit boards. *On each side.

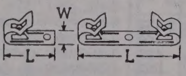
WITH SOLDER TERMINALS

Cat. No.	Cont. Pos.	Mtg. Ctr.	O'All Lgth.	Ea. 1-24	25- 49	50- 99	100- 249
14-50-12A-30	6*	1.531"	1.785"	$1.33	$1.06	$0.90	$0.71
14-50-20A-30	10*	2.156"	2.410"	1.78	1.43	1.18	.96
14-50-24A-30	12*	2.469"	2.723"	2.02	1.69	1.34	1.07
14-50-30A-30	15*	2.937"	3.191"	2.36	1.87	1.58	1.26
14-50-36A-30	18*	3.406"	3.660"	2.70	2.15	1.79	1.43
14-50-44A-30	22*	4.031"	4.285"	3.15	2.52	2.10	1.67
14-50-50A-30	25*	4.500"	4.759"	3.76	3.00	2.50	2.01

WITH WIRE-WRAP TERMINALS

Cat. No.	Cont. Pos.	Mtg. Ctr.	O'All Lgth.	Ea. 1-24	25- 49	50- 99	100- 249
14-50-12B-20	6*	1.531"	1.785"	$3.23	$2.60	$2.16	$1.73
14-50-20B-20	10*	2.156"	2.410"	4.06	3.24	2.71	2.16
14-50-24B-20	12*	2.469"	2.723"	4.47	3.57	2.98	2.38
14-50-30B-20	15*	2.937"	3.191"	5.07	4.06	3.39	2.71
14-50-36B-20	18*	3.406"	3.660"	5.69	4.54	3.79	3.04
14-50-44B-20	22*	4.031"	4.285"	6.49	5.20	4.33	3.46

G-C FAHNESTOCK CLIPS



A popular terminal for experimental or breadboard construction. Made of nickel-plated spring brass. *Double type, all others single. When ordering specify quantity desired.

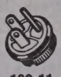
Cat. No.	Size W x L	Hole Size	Max. Wire	Pkg. 10	Box 100	Box 1000
59-6301	7/32" x 1/2"	#4	16 AWG	$.19	$1.91	$15.26
59-6302	5/16" x 3/4"	#6	14 AWG	.22	2.23	17.83
59-6303	3/8" x 1"	#8	10 AWG	.38	3.82	30.52
59-6304*	5/16" x 1½"	#6	10 AWG	1.43	14.26	114.14

AMPHENOL CONNECTORS

61-M

61-F

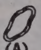
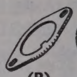
60-M

60-F

160-11

160-10

FOR POWER CORDS

RATED 15 AMPS AT 115 VOLTS


(A)

(B)

(C)

(D)

Rugged, compact units for use with electronic or electrical equipment, power tools, appliances, etc. Basic units are molded black phenolic with brass pins or copper alloy contacts. Universal 2-Pole (61-M and 61-F) mate with standard electric plugs. Basic unit bodies are grooved to mount to chassis (.031" to .050" thick) by means of retaining ring (A), or to mounting plate (B), or to accept the shielding shells (C) with grommet, or (D) with cable clamp. Retainer ring mounting requires 1-11/64" keyed hole. Mounting plate takes 1-9/32" dia. hole, has two elongated screw holes on 1½" to 1-55/64" centers. All units are UL approved except 160-10 and 160-11 which require grounding after mounting. 2-Pole polarized plugs have one wide and one standard pin for polarization.

Connector Type	WITH RETAINER RING (A)			WITH MOUNTING PLATE (B)			WITH GROMMET COVER (C)			WITH CABLE CLAMP COVER (D)		
	Cat. No.	Ea. 1-49	50-99	Cat. No.	Ea. 1-49	50-99	Cat. No.	Ea. 1-49	50-99	Cat. No.	Ea. 1-49	50-99
2-pole, universal plug	1-61-M	$.58	$.50	1-61-M1	$.54	$.46	1-61-M4	$.53	$.45	1-61-M11	$.42	$.36
2-pole, polarized plug	1-61-MP	.46	.39	1-61-MP1	.46	.39	1-61-MP4	.52	.45	1-61-MP11	.46	.39
3-pole, polarized plug	1-60-M	.58	.50	1-60-M1	.58	.50	1-60-M4	.65	.56	1-60-M11	.58	.50
2-pole, universal recept.	1-61-F	.42	.36	1-61-F1	.49	.42	1-61-F4	.48	.42	1-61-F11	.62	.53
3-pole, polarized recept.	1-60-F	.48	.41	1-60-F1	.56	.48	1-60-F4	.55	.47	1-60-F11	.64	.55
2-pole plug, w/gnd. pin	1-160-11N	1.14	.98	....	....	....	1-160-7N	1.35	1.16	1-160-9N	1.43	1.22
2-pole recept., w/gnd. lug	1-160-10N	.95	.82	....	....	....	1-160-6N	1.07	.92	1-160-8N	1.14	.98

"N" types are molded of Nylon.

FOR FLUSH OR RECESSED MOUNTING

MIP-61F
160-2

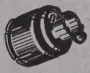
61-M10

Molded-in-plate types 61-MIP-61F and 160-2/3 are for flush mounting in 1-9/32" holes, have two 5/32" screw holes on 1½" centers. Type 61-61 shell is supplied with retainer-ring type connectors as specified below, mounts above or below (1-3/16") chassis in 1-7/16" hole, has two 5/32" screw holes on 1¾" centers. The 61-61 shell also accepts "S" type sockets, and "CP" type plugs.

Insert Description	MIP TYPES			61-61 TYPES		
	Cat. No.	Ea. 1-49	50-99	Cat. No.	Ea. 1-49	50-99
2-pole, universal recept.	1-61-MIP-61F	$.39	$.34	1-61-F10	$.62	$.53
2-pole, universal plug	....	...	...	1-61-M10	.65	.56
2-pole, polarized plug	....	...	...	1-61-MP10	.46	.39
Mounting shell only	....	...	...	1-61-61	.14	.12
2-pole recept., gnd. lug	1-160-2N	1.02	.88	1-160-4N	1.19	1.02
3-pole plug, w/gnd. pin	1-160-3N	1.41	1.21	1-160-5N	1.56	1.34

"N" types are molded of Nylon.

MULTI-WIRE CONNECTORS

(G)

(H)

For use with standard tube sockets for interconnecting electronic or electrical units. Current rating 5 amps. RMS voltage ratings: CP4 2000 v.; CP5 to CP9 1250 v.; CP11 and CP12 500 v. Male cable connectors below consist of a "CP" plug (see E) with a grommet type (G) or cable clamp type (H) shield cover. The female connectors consist of a type "S" socket (see preceding pages) with a grommet (G) or cable clamp (H) type shield cover. "T" type units are molded mica-filled phenolic. All others are molded black phenolic. Octal types use molded center post with locating key on side.

"CP" PLUGS

With retainer ring (E below) for mounting in 1-11/64" keyed hole, or with mounting plate (F below) for 1-3/8" hole, with two 5/32" holes on 1½" to 1-55/64" ctrs. "T" types mica-filled.

WITH RETAINER RING (E)

Plug Type	Cat. No.	Net 1-49	50-99	100-249
4-pin	1-86-CP4	$.295	$.247	$.221
5-pin	1-86-CP5	.298	.250	.223
6-pin	1-86-CP6	.319	.267	.239
7-pin, small	1-86-CP7S	.330	.275	.246
8-pin, octal	1-86-CP8	.322	.270	.241
8-pin, octal	1-86-CP8T	.327	.274	.246
9-pin, octal	1-86-CP9	.330	.276	.247
11-pin, octal	1-86-CP11	.337	.282	.253
11-pin, octal	1-86-CP11T	.312	.261	.234
12-pin, octal	1-86-CP12	.347	.290	.260
16-pin, octal	1-86-CP16	.348	.291	.261

WITH MOUNTING PLATE (F)

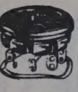
Plug Type	Cat. No.	Net 1-49	50-99	100-249
4-pin	1-86-RCP4	.380	.318	.285
5-pin	1-86-RCP5	.383	.321	.287
6-pin	1-86-RCP6	.405	.338	.303
7-pin, small	1-86-RCP7S	.440	.370	.330
8-pin, octal	1-86-RCP8	.407	.341	.305
9-pin, octal	1-86-RCP9	.415	.347	.311
11-pin, octal	1-86-RCP11	.422	.353	.316
12-pin, octal	1-86-RCP12	.447	.374	.335

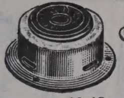
(E)

(F)

Insert Description	---WITH GROMMET COVER (G)---						--WITH CABLE CLAMP COVER (H)--					
	-----FEMALE-----			------MALE------			-----FEMALE-----			------MALE------		
	Cat. No.	Ea. 1-49	50-99	Cat. No.	Ea. 1-49	50-99	Cat. No.	Ea. 1-49	50-99	Cat. No.	Ea. 1-49	50-99
4-pin	1-78-PF4	$.500	$.432	1-86-PM4	$.545	$.471	1-78-PF4-11	$.611	$.531	1-86-PM4-11	$.656	$.570
5-pin	1-78-PF5	.515	.446	1-86-PM5	.548	.474	1-78-PF5-11	.626	.545	1-86-PM5-11	.660	.573
6-pin	1-78-PF6	.540	.467	1-86-PM6	.570	.491	1-78-PF6-11	.651	.566	1-86-PM6-11	.681	.590
7-pin, small	1-78-PF7S	.313	.262	1-86-PM7S	.580	.500	1-78-PF7S-11	.313	.262	1-86-PM7S-11	.691	.600
8-pin, octal	1-78-PF8	.501	.434	1-86-PM8	.572	.492	1-78-PF8-11	.612	.533	1-86-PM8-11	.683	.593
9-pin, octal	1-78-PF9	.534	.461	1-86-PM9	.580	.500	1-78-PF9-11	.645	.560	1-86-PM9-11	.691	.600
11-pin, octal	1-78-PF11	.577	.500	1-86-PM11	.587	.506	1-78-PF11-11	.688	.600	1-86-PM11-11	.698	.605
12-pin, octal	....	....	....	1-86-PM12	.600	.514		....	....	1-86-PM12-11	.711	.613
Cable clamp	For use with 78 & 86 series covers									1-79-CC4	.090	.074

AMPHENOL SOCKETS


"S"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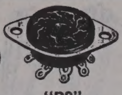
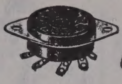
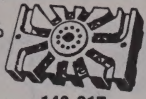

"RS"


MIP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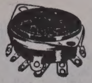
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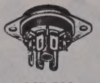
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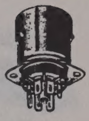

147-905

FOR ELECTRONIC EQUIPMENT

"S" SOCKETS

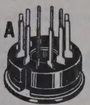
Mount on 22 to 18 gauge chassis by neans of retainer ring. Black phenolic bodies. "T" types mica-filled phenolic. Mounting hole dia. 1.156". *Octal type.

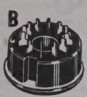
Cat. No.	Contacts	Ea. 1-49	50-99	100-249
1-78-S4	4	$.25	$.208	$.186
1-78-S5	5	.265	.222	.198
1-78-S6	6	.29	.243	.217
1-78-S8	8*	.251	.21	.188
1-78-S8T	8*	.29	.243	.217
1-78-S9	9*	.284	.237	.213
1-78-S11	11*	.327	.274	.235
1-78-S11T	11*	.37	.309	.277

"SS" SOCKETS

Similar in style and mounting to "S" types but with steatite bodies.

1-49-SS4	4	$.82	$.688	$.616
1-49-SS5	5	.857	.716	.642
1-49-SS8	8*	1.03	.864	.774





NEW "S" SOCKETS

Similar in style and mounting to "S" types above. Black phenolic bodies. Wire wrap terminals. .500" long. Octal types.

WIRE-WRAP TYPES (A)

1-78-S8W-0500	8	$.358	$.30	$.268
1-78-S9W-0500	9	.383	.312	.287
1-78-S11W-0500	11	.39	.327	.293
1-78-S12W-0500	12	.426	.356	.32

PC TYPES (B)

1-78-S8W-0125	8	.313	.262	.234
1-78-S9W-0125	9	.337	.282	.253
1-78-S11W-0125	11	.343	.287	.257
1-78-S12W-0125	12	.351	.294	.263
1-78-S16W-0125	16	.433	.362	.325

"RS" SOCKETS

These are "S" types on a nickel-plated mounting plate. Mounting holes on 1.675 n. centers. Black phenolic bodies.

1-78-RS4	4	$.307	$.257	$.23
1-78-RS5	5	.331	.277	.247
1-78-RS6	6	.354	.296	.263
1-78-RS7S	7	.38	.318	.282
1-78-RS8	8*	.335	.28	.25
1-78-RS8T	8*	.335	.28	.25
1-78-RS11	11*	.44	.368	.33
1-78-RS11T	11*	.455	.38	.34

"RSS" SOCKETS

These are "SS" type sockets on a nickel plated mounting plate. Bodies are low oss steatite. Mounting holes are on .675" centers.

-49-RSS4	4	$.95	$.796	$.713
-49-RSS5	5	.96	.802	.72
-49-RSS8	8*	1.05	.874	.782

For complete socket information request AMPHENOL General Line Catalog GL2.

"MIP" SOCKETS

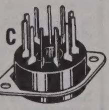
Black phenolic bodies with molded-in mounting plate. Mounting holes on 1.5" centers. "T" types have mica-filled phenolic bodies. *Octal type.

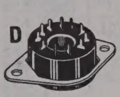
Cat. No.	Contacts	Ea. 1-49	50-99	100-249
1-77-MIP4	4	$.242	$.203	$.181
1-77-MIP5	5	.267	.223	.20
1-77-MIP6	6	.29	.243	.218
1-77-MIP8	8*	.262	.22	.196
1-77-MIP8T	8*	.281	.235	.211
1-77-MIP9	9*	.302	.252	.226
1-77-MIP9T	9*	.302	.252	.226
1-77-MIP11	11*	.31	.26	.232
1-77-MIP11T	11*	.373	.312	.28
1-77-MIP12	12*	.36	.30	.269

COMPACT "MIP"

Black phenolic bodies with molded-in mounting plate. Mounting holes on 1.312" centers. "T" type mica-filled phenolic.

1-88-8	8*	$.292	$.244	$.22
1-88-T	8*	.292	.244	.22





NEW "MIP" SOCKETS

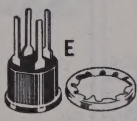
Black phenolic bodies with molded-in mounting plate. Mounting holes on 1.5" centers. Wire wrap terminals are .500" long. All are octal types.

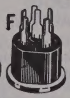
WIRE-WRAP TYPES (C)

1-77-MIP8W-0500	8	$.365	$.306	$.274
1-77-MIP9W-0500	9	.405	.338	.303
1-77-MIP11W-0500	11	.456	.382	.34
1-77-MIP12W-0500	12	.474	.396	.275

PC TYPES (D)

1-77-MIP8W-0125		.327	.273	.245
1-77-MIP9W-0125		.367	.307	.274
1-77-MIP11W-0125		.393	.33	.294
1-77-MIP12W-0125		.41	.343	.307
1-77-MIP20W-0125		.704	.59	.527





MINIATURE SOCKETS

For tubes, relays, cable connections, etc. Ring mounting in .625" hole. Black phenolic bodies. Wire wrap terminals are .500" long. Voltage rating 500 v.

WIRE-WRAP TYPES (E)

1-78-S3SW-0500	3	$.188	$.157	$.144
1-78-S4SW-0500	4	.263	.22	.196

PC TYPES (F)

1-78-S3SW-0125	3	.152	.128	.114
1-78-S4SW-0125	4	.227	.19	.17
1-78-S5SW-0125	5	.233	.195	.175
1-78-S6SW-0125	6	.238	.20	.178

SADDLE SOCKET

Black phenolic body. Mounting plate has 4 lugs for ground tie points. Mounting holes on 1.312" centers. *Octal.

Cat. No.	Contacts	Ea. 1-49	50-99	100-249
1-168-001	8*	$.325	$.272	$.244

MINIATURE SOCKETS FOR BOTTOM MOUNT

For miniature 7 and 9-pin button-base tubes. †Black phenolic. ‡Mica-filled phenolic. *Center shield. Voltage rating 500 v-rms at 1 amp.

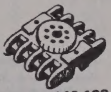
1-147-500†	7*	$.38	$.316	$.283
1-147-504†	7	.337	.282	.252
1-59-409†	9*	.444	.371	.333
1-147-505‡	7*	.39	.327	.293
1-59-410‡	9*	1.03	.855	.766

MINIATURE SOCKETS WITH SHIELD BASE

The same as those above but with a base for a shield, and for top of chassis mounting. †Black phenolic. ‡Mica-filled phenolic. *Center shield.

1-147-905†	7*	$.46	$.384	$.344
1-59-406†	9*	.525	.44	.393
1-147-913‡	7*	.458	.383	.343
1-147-916‡	7*	.533	.445	.40
1-59-407‡	9*	.513	.43	.383
1-59-403‡	9*	.722	.604	.54

RELAY SOCKETS


146-103

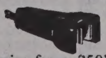
Rugged, basic sockets for industrial uses Molded melamine bodies with high barriers for long leakage paths. Heavy screw terminals for high current capacity. 8-contact types rated 5 amps at 1250 v-rms. 11-contact type 10 amps at 600 v-rms. *Top mounting. **Same with 4 tie points. †Bottom mounting. ‡Top or bottom mounting with 4 molded-in threaded brass inserts.

Cat. No.	Contacts	Ea. 1-49	50-99	100-249
1-146-103*	8	$1.64	$1.45	$1.27
1-146-104**	8	2.04	1.71	1.53
1-146-203†	8	1.64	1.45	1.27
1-146-817‡	11	3.53	2.95	2.65

MOUNTING SHELL

Aluminum shells which can be used to extend "S" sockets, "CP" plugs, and outlet type connectors .8125" above or below a mounting surface. Knockouts on 4 sides of shell for wire entry. Mounts in a 1.750" hole for recessed mounting. Has 3 notched holes for No. 6 screws.

Cat. No.	Unit	Ea. 1-49	50-99	100-249
1-23-1S	Shell	$.256	$.217	$.195

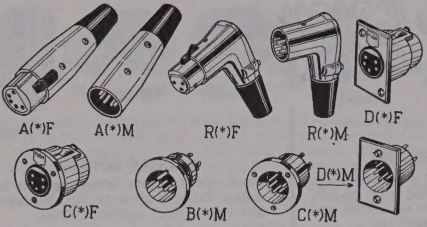


GRID/PLATE CONNECTOR

For all tube caps measuring from .250" to .375" indiameter.

Cat. No.	Unit	Ea. 1-49	50-99	100-249
1-63-1	Cap	$.248	$.208	$.186

SWITCHCRAFT CONNECTORS



AUDIO CONNECTORS

Satin-finished, die-cast zinc shells, with removeable easy-solder one-piece, high-impact thermosetting plastic inserts. Captive design retaining screw connects shell to grounding pin. Types A (*) F R(*)F, D(*)F and C(*)F have push-type lock-release. Pins are brass, silver plated and chromate dipped. Connectors are interchangeable with Cannon XLR Series and Amphenol 91-850 Series Connectors. Cat. No's indicate 3, 4, or 5 pins, and male (M) or female (F).

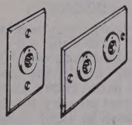
CABLE CONNECTORS

Cat. No.	Lgth. or Dia.	Ea. 1-24	25-49	Cat. No.	Lgth. or Dia.	Ea. 1-24	25-49
223-A3M	2.761"	$1.26	$1.16	223-A3F	3.218"	$1.47	$1.35
223-A4M	2.761"	1.35	1.24	223-A4F	3.218"	1.83	1.68
223-A5M	2.761"	2.55	2.34	223-A5F	3.218"	3.15	2.89
223-R3M	*	3.06	2.81	223-R3F	**	3.30	3.03
223-R4M	*	3.15	2.89	223-R4F	**	3.75	3.44
223-R5M	*	4.50	4.13	223-R5F	**	5.10	4.68

CHASSIS CONNECTORS

223-B3M	1.109"	$1.80	$1.65	223-D5M	†	$2.19	$2.01
223-B4M	1.109"	1.89	1.73	223-C3F	1.437"	1.92	1.76
223-B5M	1.109"	3.09	2.83	223-C4F	1.437"	2.01	1.84
223-C3M	1.437"	.96	.88	223-C5F	1.437"	3.15	2.89
223-C4M	1.437"	1.05	.96	223-D3F	‡	1.98	1.82
223-C5M	1.437"	2.25	2.06	223-D4F	‡	2.07	1.90
223-D3M	†	1.20	1.10	223-D5F	‡	3.21	2.94
223-D4M	†	1.29	1.18	....		.....	....

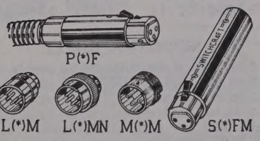
*1.218" x 1.937" on ctrs. ** 1.718" x 1.937" on ctrs. † .875" x 1.437". ‡ 1.109" x 1.437".



WALL PLATES

Add the finishing touch to permanent sound installations. Stainless steel wall plates are available with one or two chassis type connectors. Plates measure 4.5" x 2.75" and fit a standard electrical outlet junction box. Chassis connectors used are illustrated above.

Cat. No.	Equipped With	Ea. 1-24	25-49	Cat. No.	Equipped With	Ea. 1-24	25-49
223-G3MS	1 #B3M	$3.12	$2.86	223-H3MS	2 #B3M	$4.38	$4.02
223-G4MS	1 #B4M	3.30	3.03	223-H4MS	2 #B4M	4.74	4.35
223-J3FS	1 #D3F	3.24	2.97	223-K3FS	2 #D3F	4.62	4.24
223-J4FS	1 #D4F	3.42	3.14	223-K4FS	2 #D4F	4.98	4.57

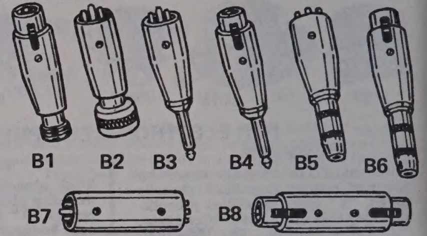


AUDIO ADAPTERS

Type P(*)F gas 5/8"-27 NS 28 Internal thread, adapts to gooseneck. Type P(*)FM has male and female connectors, with 1.5" of usable space between for electronic circuitry. Types L(*)M, L(*)MN and P(*)FM are mounting on microphones or other equipment.

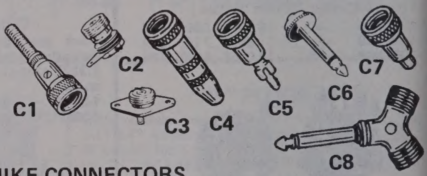
Cat. No.	Lgth. or Dia.	Ea. 1-24	25-49	Cat. No.	Lgth. or Dia.	Ea. 1-24	25-49
223-P3F	2.25"	$1.44	$1.32	223-L5MN	.906"	$2.49	$2.28
223-P4F	2.25"	1.80	1.65	223-M3M	.734"	1.65	1.51
223-P5F	2.25"	3.00	2.75	223-M4M	.734"	1.74	1.60
223-L3M	.765"	1.50	1.38	223-M5M	.734"	2.34	2.15
223-L4M	.765"	1.59	1.46	223-S3FM	4"	2.70	2.48
223-L5M	.765"	2.19	2.01	223-S4FM	4"	2.88	2.64
223-L3MN	.906"	1.80	1.65	223-S5FM	4"	3.78	3.47
223-L4MN	.906"	1.89	1.73	....	....	....	...

Quantity prices, up to 999 units, are available for all SWITCHCRAFT Products and will be quoted on request.



AUDIO CONNECTOR ADAPTERS

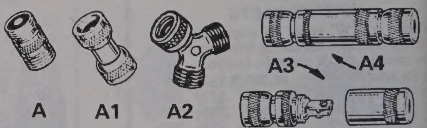
Cat. No.	See Fig.	Description	Ea. 1-24	25-49	50-99
223-335A	B1	A3F to 2501M	$2.13	$1.95	$1.78
223-339A	B2	A3M to 2501F	2.13	1.95	1.78
223-386	B4	A3M to .25" phone plug	2.85	2.61	2.38
223-387	B3	A3F to .25" phone plug	2.52	2.31	2.10
223-383	B6	A3F to 2-C phone plug	2.91	2.67	2.43
223-384	B5	A3M to 2-C phone plug	2.61	2.39	2.18
223-390	B7	A3M to A3M splice	2.52	2.31	2.10
223-389	B8	A3F to A3F splice	3.00	2.75	2.50



MIKE CONNECTORS

2501 Series has .625"-27 threaded portion, is for use with coaxial cables up to .281" maximum diameter. Coupling ring on 2501F retracts to form 2501M. Miniature 5501 Series is approximately one-half the size of the 2501 Series, accepts cables up to .187" maximum diameter. Coupling ring on 5501F also retracts. *Shorting.

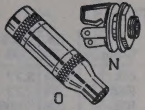
Cat. No.	See Fig.	Connector Description	Ea. 1-24	25-49	50-99
223-2501F	C1	Female cable connector	$.48	$.44	$.40
223-2501M	—	Male cable connector	.39	.358	.325
223-2501MP	C2	Male panel connector*	.36	.33	.30
223-2501MPC	C2	Male panel connector*	.45	.413	.375
223-2501MBL	C3	Insulated panel connector	.42	.385	.35
223-338A	C5	Female to male phono plug	.81	.743	.675
223-44	C6	Male to phone plug	.39	.358	.325
223-332A	C4	Female to phone jack	1.26	1.16	1.05
223-334A	C7	Female to phono jack	1.05	.963	.875
223-330M	C8	Dual male to phone plug	1.50	1.38	1.25
223-5501F	—	Mini female cable conn.	.48	.44	.40
223-5501M	—	Mini male cable connector	.39	.358	.325
223-5501MF	—	Mini male panel connector	.36	.33	.30
223-5501MPC	—	Mini panel connector*	.57	.523	.475



Cat. No.	See Fig.	Adapter Description	Ea. 1-24	25-49	50-99
223-2501MT	A	Dual male connector	$.96	$.88	$.80
223-2501FT	A1	Dual female connector	.96	.88	.80
223-25Y	A2	Female to dual male	1.44	1.32	1.20
223-2501FL	A4	Female to screw term.†	1.74	1.60	1.45
223-2501FS	A3	Female to screw term.	1.26	1.16	1.05

†With cable clamp.

SWITCHCRAFT



"TINI-JAX"

Miniature 2-conductor jacks for use with the Type 750 "Tini-Plugs" listed on the preceding page. O'all diameter .437". O'all depth behind panel .406". Mount in .250" hole in up to .125" thick panel.

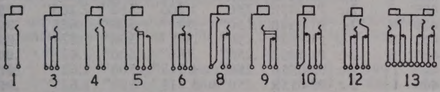
Cat. No.	See Ckt.	Type Plug	Ea. 1-24	25-49	50-99	100-249	250-499
223-41	1	750	$.33	$.303	$.275	$.22	$.209
223-42A	3	750	.36	.33	.30	.24	.228
223-43A	6	750	.54	.495	.45	.36	.342
223-125	Extension jack		.90	.825	.75	.60	.57

"MICRO-JAX"

Similar in appearance to the "Tini-Jax" (Fig. N) above, but for use with the "Micro-Plug" listed on the preceding page. O'all dia. .250", depth behind panel .375". Mounts in .190" dia. hole on up to .093" thick panels.

Cat. No.	See Ckt.	Mating Plugs	Ea. 1-24	25-49	50-99	100-249
223-TR-2A	3	850, 855, 880	$.39	$.358	$.325	$.26

JACK SCHEMATICS



STEREO "LITTEL-JAX"

Designed for use with a 3-conductor plug to connect a stereo headset to the dual outputs of a stereo amplifier. Opens speaker circuits when plug is inserted into jack. O'all dia. .750", depth 1". Mounts in .375" hole on up to .125" thick panels. See ckt. 12 above.

Cat. 223-14B For 260, 267, 269, 297 plugs **Net $.78**

THICK PANEL JACK

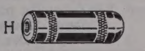
Made of nickel-plated brass. Mounts in .468" dia. hole on panels up to 1.25" thick. Accepts .250" plugs.

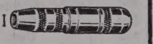
Cat. No.	See Ckt.		Mating Plugs	Ea. 1-24	25-49	50-99	100-249
223-151	1	2-con.	250, 280	$.99	$.908	$.825	$.65
223-152B	4	3-con.	267, 297	1.08	.99	.90	.72

COAXIAL-VIDEO JACK

For 75-ohm circuitry of audio and video patching panels. Mates with standard coaxial-video plugs. For use with RG-59/U cable. Mounts in 7/16" dia. hole.

Cat. No.	Description	Ea. 1-24	25-49	50-99	100-249
223-3601	75-ohm coax jack	$6.30	$5.78	$5.25	$4.20

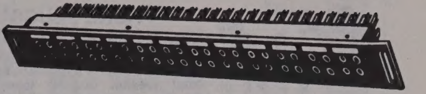




CABLE "EXTENSION-JAX"

For use with Standard or Littel-Plug Phone Plugs as listed below. Types 121 and 131 are ½" dia. x 2½" long, others 11/16" dia. x 2-5/32" long. §Conductors. *Typical mating plug.

Cat. No.	See Fig.	§	Color	Ter. Type	Mating Plug*	Ea. 1-24	25-49	50-99
223-80	G	2-c	Black		250	$.87	$.789	$.725
223-88	G	2-c	Black		250	.78	.715	.65
223-120	H	2-c	Shld.		270	1.14	1.05	.95
223-121	I	2-c	Shld.		270	1.20	1.10	1.00
223-126	H	2-c	Shld.		R-280	1.26	1.16	1.05
223-128	H	2-c	Shld.		270	1.05	.963	.875
223-S-128	H	2-c	Shld.		S-250	1.11	1.02	.925
223-131	I	3-c		Solder	290	1.50	1.38	1.25
223-830	G	3-c		Screw	267	1.14	1.05	.95
223-S-830	G	3-c		Screw	480	1.50	1.38	1.25
223-838	G	3-c		Solder	267	1.05	.963	.875
223-1230	H	3-c		Screw	290	1.47	1.35	1.23
223-S-1230	H	3-c		Screw	480	1.80	1.65	1.50
223-1238	H	3-c		Solder	290	1.35	1.24	1.13



JACK PANELS

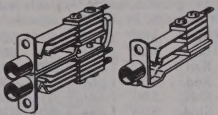
For switching, distribution and control of audio signals in sound installations. Equipped with Type T-332A (Diagram 1) jacks. Black phenolic panel reinforced with steel.

Cat. No.	Jack Rows	Jack No.	Panel Size	Ea. 1-24	25-49	50-99
223-1232A	1	24	1¾" x 19"	$25.20	$23.10	$21.00
223-1432A	1	26	1¾" x 19"	27.15	24.89	22.63
223-2432A	2	48	2-1/8" x 19"	44.10	40.43	36.75
223-2632A	2	52	1¾" x 19"	49.80	45.65	41.50

"TINY-TELEPHONE" JACK PANELS

Panel size 1.75" x 19". Series 1600 is a double row panel accepting 96 single "TT-Jax". Series 1700 is a double row panel accepting 48 "TT-Twin-Jax". With "kwik-change" designation strips.

Cat. No.	Jack Rows	Jack No.	Description	Net 1-24	25-49
223-1600*	2	96	Accepts single "TT jax"	$18.00	$16.50
223-1632A	2	96	With 96 TT-32A jacks	87.00	79.75
223-1700*	2	48	Accepts 48 "TT twin-jax"	21.00	19.25
223-1789	2	48	With 48 TT89 "twin-jax"	156.00	143.00

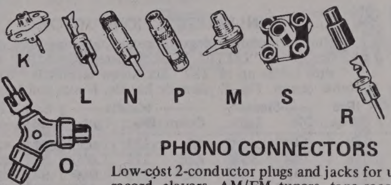


"TINI-TELEPHONE" JACKS

For use on "TINI-TELEPHONE" jack panels. Jacks mount in .250" holes on up to .375" thick panels. Overall depth 2.187", center to center .312". Type TT-89 (at left above) is two single jacks welded together. Center to center mounting .312". Prices for TT-120 or TT-140 assembled patch cords available on request.

Cat. No.	Type Jack	See Ckt.	Type Plug	Ea. 1-24	25-49	50-99
223-TT-31	Sgl. 2-con.	1	TT-251	$.72	$.66	$.60
223-TT-32A	Sgl. 2-con.	3	TT-251	.87	.798	.725
223-TT-32B	Sgl. 3-con.	4	TT-253	.84	.77	.70
223-TT-34B	Sgl. 3-con.	12	TT-253	1.02	.935	.85
223-TT-89	Dual 3-con.	13	*	3.00	2.75	2.50
223-TT-251	2-con. plug only			1.32	1.21	1.10
223-TT-253	3-con. plug only			1.92	1.76	1.60

**TT-120 and TT-140 are typical patch cords.

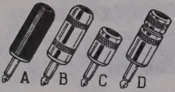


PHONO CONNECTORS

Low-cost 2-conductor plugs and jacks for use on record players, AM/FM tuners, tape recorders, etc. RF types use low-loss Nylon insulation.

Cat. No.	See Fig.	Connector Description	Ea. 1-24	25-49	50-99
223-3501MC	L	Cable plug with cable clamp	$.09	$.083	$.075
223-3501M	–	Cable plug less cable clamp	.06	.055	.05
223-3501F	K	Chassis jack	.09	.083	.075
223-3501FP	M	Chassis jack	.24	.22	.20
223-3501FR	–	Same, panels up to 7/32"	.30	.275	.25
223-3502	N	Cable plug, shielded	.33	.303	.275
223-3503	P	Extension jack	.42	.385	.35
223-3508-1	R	Cable plug, red handle	.15	.138	.125
223-3508-2	R	Cable plug, black handle	.15	.138	.125
223-3508-5	R	Cable plug, white handle	.15	.138	.125
223-3511	S	Chassis jack, open ckt.	.21	.193	.175
223-3511A	S	Same, open ckt., grounded	.21	.193	.175
223-3512	S	Chassis jack, closed ckt.	.24	.22	.20
223-3512A	S	Same, closed ckt., grounded	.24	.22	.20
223-330F	O	Male to 2 female phono	1.29	1.18	1.08
223-3504M	L	Cable plug for RF use	.15	.138	.125
223-3505F	M	Chassis jack for RF use	.39	.358	.325
223-3507	N	Shielded cable plug for RF	.51	.468	.425

SWITCHCRAFT



PHONE PLUGS

Generally used for headphones, microphone, musical instrument and recorder inputs to amplifiers, and for loud speaker outputs from high fidelity or stereo amplifiers.

"STANDARD" 2-CONDUCTOR

With screw terminals. *With built-in cable clamp. †"Silent Plug" features shorting device if plug is partially removed from input jack to prevent open circuit "squeals".

Cat. 223-★	See Fig.	Sleeve Dia.	Sleeve Lgth.	Color	Handle Dia.	Handle Lgth.	Ea. 1-24	25-49
40	A	.250"	1.187"	Blk.	.750"	2.062"	$.60	$.55
45	A	.250"	1.187"	Red	.750"	2.062"	.60	.55
70	B	.250"	1.187"	Shld.	.687"	2.156"	.96	.88
160	C	.250"	1.187"	Shld.	.687"	1.093"	.78	.715
169†	C	.250"	1.187"	Shld.	.750"	1.093"	1.59	1.46
170*	D	.250"	1.187"	Shld.	.687"	2.062"	1.23	1.13

"STANDARD" 3-CONDUCTOR

60	A	.250"	1.187"	Blk.	.750"	2.062"	.81	.743
90	C	.250"	1.187"	Shld.	.687"	1.093"	1.02	.935
190	B	.250"	1.187"	Shld.	.687"	2.062"	1.17	1.07
190A*	D	.250"	1.187"	Shld.	.687"	2.062"	1.47	1.35

"LITTEL PLUGS" 2-CONDUCTOR

With screw terminals. *With solder terminals. "C" types have integral cable clamp. ‡Wide insulator permits use in 3-circuit jack without shorting. †Short sleeve for use in Reverse recorders.

240	A	.250"	1.187"	Blk.	.500"	1.686"	$.57	$.523
C-240	A	.250"	1.187"	Blk.	.500"	1.686"	.66	.605
245	A	.250"	1.187"	Red	.500"	1.686"	.57	.523
C-245	A	.250"	1.187"	Red	.500"	1.686"	.66	.605
270	B	.250"	1.187"	Shld.	.500"	1.686"	.81	.743
C-270	B	.250"	1.187"	Shld.	.500"	1.686"	.90	.825
250*	A	.250"	1.187"	Blk.	.500"	1.686"	.54	.495
255*	A	.250"	1.187"	Red	.500"	1.686"	.54	.495
R-280†*	B	.250"	......	Shld.	.500"	1.686"	.99	.908
S-280*	B	.206"	1.187"	Shld.	.500"	1.686"	.78	.715
S-250*	A	.206"	1.187"	Blk.	.500"	1.686"	.57	.523

"LITTEL PLUGS" 3-CONDUCTOR

260	A	.250"	1.187"	Blk.	.500"	1.686"	.90	.825
267*	A	.250"	1.187"	Blk.	.500"	1.686"	.81	.743
269*	A	.250"	1.187"	Red	.500"	1.686"	.81	.743
290	B	.250"	1.187"	Shld.	.500"	1.686"	1.05	.963
297*	B	.250"	1.187"	Shld.	.500"	1.686"	.99	.908
S-260	A	.206"	1.187"	Blk.	.500"	1.686"	1.23	1.13

"TINI-PLUGS" 2-CONDUCTOR

Miniature phone plugs approximately one-third the size of the "LITTEL PLUGS" listed above. For use with cables up to .187" dia. Screw terminals. *With solder lug/cable clamp. Fig. E phenolic handle, F nickeled brass.

Cat. 223-★	See Fig.	Sleeve Dia.	Sleeve Lgth.	Color	Handle Dia.	Handle Lgth.	Ea. 1-24	25-49
740	E	.140"	.562"	Blk.	.375"	1.000"	$.57	$.523
745	E	.140"	.562"	Red	.375"	1.000"	.57	.523
750*	E	.140"	.562"	Blk.	.375"	1.000"	.54	.495
755*	E	.140"	.562"	Red	.375"	1.000"	.54	.495
770	F	.140"	.562"	Shld.	.375"	1.000"	.78	.715
780*	F	.140"	.562"	Shld.	.375"	1.000"	.75	.688

"MICRO-PLUGS" 2-CONDUCTOR

Used for earphone plug on many transistor radios. For cables up to .109" dia. With combination solder lug and cable clamp. Handles are anodized red, black or natural aluminum.

850	–	.097"	.453"	Blk.	.250"	0.562"	$.51	$.468
855	–	.097"	.453"	Red	.250"	0.562"	.51	.468
880	–	.097"	.453"	Alum.	.250"	0.562"	.51	.468

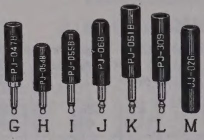
FLAT PLUGS

"Chassis hugging" plugs for use where conventional long handled plugs are not suited to the design of equipment. They permit leads to be brought out at right angles to the equipment. Metal parts are machined brass. Handles are colored plastic, measure 1.250" x 1.0" x .468" long. Screw terminals or *solder lug terminals. S-230 and S-235 are military versions of PJ-068.

Continued On Next Column.

FLAT PLUGS CONT'D.

Cat. No.	For Cable	Sleeve Dia.	Sleeve Lgth.	Type Term.	Color	Ea. 1-24	25-49
223-220	2-c	.250"	1.187"	Screw	Blk.	$.84	$.77
223-225	2-c	.250"	1.187"	Screw	Red	.84	.77
223-227	2-c	.250"	1.187"	Solder	Blk.	.66	.605
223-229	2-c	.250"	1.187"	Solder	Red	.66	.605
223-230	3-c	.250"	1.187"	Screw	Blk.	1.02	.935
223-235	3-c	.250"	1.187"	Screw	Red	1.02	.935
223-237	3-c	.250"	1.187"	Solder	Blk.	.99	.908
223-239	3-c	.250"	1.187"	Solder	Red	.99	.908
223-S-230	3-c	.206"	1.156"	Screw	Blk.	1.29	1.18

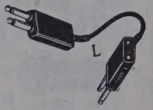


MIL TYPE "LITTEL-PLUGS"

Exact replacement plugs for use on Military Equipment. All have screw terminals. Suffix "B" on MIL Type indicates black plastic handle, "R" red, and "M" metal for shielding purposes. §Number of conductors.

Cat. 223-★	See Fig.	§	MIL Type	Sleeve Dia.	Sleeve Lgth.	Handle Dia.	Handle Lgth.	Ea. 1-24
420	G	2-c	PJ-047B	.250"	1.203"	.562"	2.203"	$1.05
425	G	2-c	PJ-047R	.250"	1.203"	.562"	2.203"	1.05
430	H	2-c	PJ-054B	.250"	.781"	.500"	1.625"	.90
435	H	2-c	PJ-054R	.250"	.781"	.500"	1.625"	.90
450	H	2-c	PJ-540B	.250"	.781"	.500"	1.625"	.90
440	I	2-c	PJ-055B	.250"	1.218"	.500"	1.625"	.90
445	I	2-c	PJ-055R	.250"	1.218"	.500"	1.625"	.90
480	J	3-c	PJ-068B	.206"	1.093"	.500"	2.125"	2.16
482	K	3-c	PJ-051R	.250"	1.140"	.437"	2.078"	2.40
483	K	3-c	PJ-051B	.250"	1.140"	.437"	2.078"	2.40
484	L	3-c	PJ-309R	.206"	1.093"	.375"	1.953"	2.16
820	M	2-c	JJ-026B	.281"†	.....	.500"	2.750"	1.26

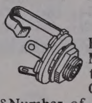
Type 820 is an extension jack. †Accepts .250" dia. sleeve plugs.



PATCH CORD SETS

For use with standard jack panels used in broadcast stations, theatres, etc. These 2-conductor patch cords use bronze tinsel conductors, insulated and shielded, with heavy Nylon braid overall. The No. 413 Twin-Plugs are 3-circuit, with two electrically independant tip circuits. Molded black phenolic handles are notched to indicate polarity. 413 is interchangeable with MIL-Type PJ-421 and W.E. 241. Shield is grounded at each end. *Twin-Plug only.

Cat. No.	Cord Lgth.	Ea. 1-24	25-49	Cat. No.	Cord Lgth.	Ea. 1-24	25-49
223-17QA17	6 in.	$7.26	$6.66	233-17QH17	4 ft.	$8.04	$7.37
223-17QB17	1 ft.	7.44	6.82	233-17QK17	6 ft.	8.58	7.87
223-17QD17	2 ft.	7.59	6.96	233-17QN17	10 ft.	9.09	8.33
223-17QF17	3 ft.	7.77	7.12	233-413	*	2.94	2.70



"LITTEL-JAX"

For use with Standard or "Littel-Plug" phone plugs. Metal parts are nickel-plated brass. Special spring tempered nickel-silver springs. Fine silver contacts. O'All dia. .750", depth 1". Mounts in .375" dia. hole. §Number of conductors. See following page for Ckt. reference.

Cat. No.	See Ckt.	§	Type Plug	Sleeve Dia.	Ea. 1-24	25-49	50-99
223-11	1	2-c	250	.250"	$.33	$.303	$.275
223-C-11	1	2-c	440	.250"	.48	.44	.40
223-L-11	1	2-c	250	.250"	.39	.358	.325
223-S-11	1	2-c	S-250	.206"	.36	.33	.30
223-12A	3	2-c	250	.250"	.42	.385	.35
223-C-12A	3	2-c	440	.250"	.57	.523	.475
223-L-12A	3	2-c	250	.250"	.42	.385	.35
223-S-12A	3	2-c	480	.206"	.42	.385	.35
223-PC-12A	3	2-c	250	.250"	.42	.385	.25
223-13	5	2-c	250	.250"	.69	.633	.575
223-13A	6	2-c	250	.250"	.63	.578	.525
223-13E	9	2-c	250	.250"	.69	.633	.575
223-12B	4	3-c	267	.250"	.42	.385	.35
223-C-12B	4	3-c	480	.206"	.57	.523	.475
223-L-12B	4	3-c	267	.250"	.54	.495	.45
223-S-12B	4	3-c	480	.206"	.54	.495	.45
223-13B	8	3-c	267	.250"	.60	.55	.50
223-S-13B	8	3-c	480	.206"	.75	.688	.625
223-14B	12	3-c	267	.250"	.78	.715	.65

JOHNSON PLUGS, JACKS & POSTS

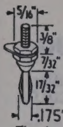


Fig. A

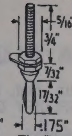


Fig. B

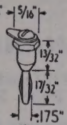


Fig. C

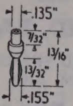


Fig. D

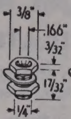


Fig. E

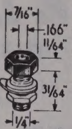


Fig. F

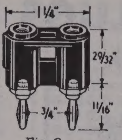


Fig. G

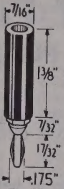


Fig. H

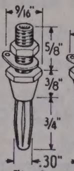


Fig. I

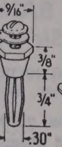


Fig. J

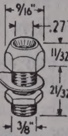
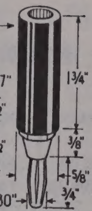


Fig. K

Fig. L →



STANDARD BANANA PLUGS

Nickel-plated brass with nickel-silver leaf spring contacts. Twin-plug is solderless, has banana jacks on top and side exit leads for multiple stacking. *Available in 10 colors. Specify desired color as explained at right. †Plastic handle.

Cat. No.	See Fig.	Furnished With	Net 1-49	50-99	100-499
71-108-0750-001	A	6-32 stud	$0.22	$0.202	$0.19
71-108-0750-002	B	6-32 stud	.23	.21	.198
71-108-0753-001	C	6-32 screw	.24	.22	.207
71-108-0754-001	D	Rivet Stud	.17	.157	.147
71-108-0752-001	H	Black handle†	.38	.345	.324
71-108-0752-002	H	Red handle†	.38	.345	.324
71-108-0200-001	G	Twin plug	.80	.734	.690

STANDARD BANANA JACKS

For use with plugs above. Machined from brass and nickel-plated. Furnished with solder lug and hex nut. †Molded plastic top.

Cat. No.	See Fig.	Furnished With	Net 1-49	50-99	100-499
71-108-0740-001	E	Lug & nut	$0.16	$0.143	$0.134
71-108-0745-001	F	Red top†	.34	.304	.289
71-108-0745-002	F	Black top†	.34	.304	.289

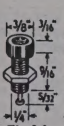


Fig. M

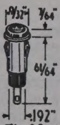


Fig. N

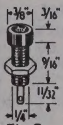


Fig. O

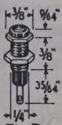


Fig. P

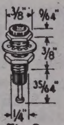


Fig. Q

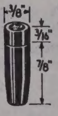


Fig. R

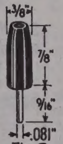


Fig. S

INSULATED PIN TIP JACKS

Bodies molded of tough, low-loss plastic in 10 different colors. Specify color as explained at right. Recessed *Silver-plated beryllium-copper. †Cadmium-plated phosphor-bronze, or ‡Silver-plated phosphor-bronze contacts rated to carry 10 amps. §Speed-clip plug-in mounting. #Metal-clad. 105-200-200 complies with MS-16108, Rev. F. of MIL-STD-242A. ¼"-32 threaded bodies with solder lug and hex nut. KV-DC and Mmf. rating to metal panel.

Cat. No.	See Fig.	KV-DC	Cap. Mmf.	Net 1-49	50-99	100-499
71-105-0601-001	M	11	2.8	$0.23	$0.209	$0.197
71-105-0801-001	O	9	2.0	.14	.124	.117
71-105-0250-001	P	7	3.8	.22	.197	.185
71-105-0200-200	Q	8	3.8	.36	.33	.30
71-105-0701-001	R	Cable jack		.30	.279	.262
71-105-0301-001	S	Cable plug		.20	.18	.16

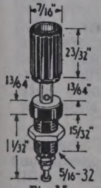


Fig. X

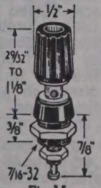


Fig. Y

"SIX-WAY" BINDING POSTS

Silver-plated stem has top drilling which accepts standard banana plug, and a cross-hole for a wire lead, pin plug, etc. Captivated top and body are molded of tough, low-loss plastic in 10 different colors. Insulation resistance is greater than 200 megs after MIL T-5422B humidity test. Average capacity to panel 3.4 mmfd.

Cat. No.	See Fig.	Rating Amps	V-DC	Net 1-49	50-99	100-499
71-111-0100-001	X	15	8Kv.	$0.38	$0.35	$0.33
71-111-0400-001	Y	30	7Kv.	.44	.405	.38

COLOR DESIGNATION

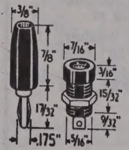
Where units shown on this page are listed as being available in 10 different colors the color is designated when ordering by adding the Color Number from the chart below to the 7th and 8th digit of the Catalog Number. For example: a Type 71-105-600 Pin Tip Jack in Red will be 71-105-602; in Grey 71-105-613. #Available from stock. Others are, for some items, available as specials.

Color	No.	Color	No.	Color	No.
White#	01	Orange	06	Violet	12
Red#	02	Yellow#	07	Grey	13
Black#	03	Brown	08	....	
Green#	04	Blue#	10	....	

JUMBO PLUGS & JACKS

Machined from brass and nickel-plated. Plugs have 6-leaf nickel-silver spring contacts. †With plastic handle.

Cat. No.	See Fig.	Furnished With	Net 1-49	50-99	100-499
71-108-0770-001	I	¼-28 stud	$0.45	$0.41	$0.38
71-108-0771-001	J	10-32 screw	.70	.643	.603
71-108-0760-001	K	3/8-32 thd.	.53	.485	.455
71-108-0772-001	L	Black handle†	.90	.82	.77
71-108-0772-002	L	Red handle†	.90	.82	.77



INSULATED BANANA PLUG & JACK

Jack body is tough, low-loss plastic. Mounts in 21/64" round or double-D hole by means of a hex nut. Recessed contacts rated 12,500 v-dc breakdown to 1/16" panel. Capacity to panel 2.4 mmf. nominal. Plug handle is plastic. Nickel-plated brass banana plug is recessed, is solderless for up to 16 ga. stranded conductors. Plug and jack are available in 10 different colors. Specify color required as explained above.

Cat. No.	Description	Net 1-49	50-99	100-999
71-108-0900-001	Jack, 5/16-32 body	$0.13	$0.12	$0.11
71-108-0300-001	Plug, solderless	.25	.228	.214

PRINTED CIRCUIT CONNECTORS

Sub-miniature tip plugs and jacks for printed circuit or other restricted space uses. Current rating 5 amps max. Operating voltage 1500 rms at sea level. Contact resistance less than 2 milliohms. Insulation is low-loss plastic per MIL-M-20693A. Plugs are machined from one-piece brass, require solder connection. Jacks have beryllium-copper contacts. 71-105-750 (V) jack accepts plug from both ends and top. All are available in 10 colors. When ordering specify color required as explained above.

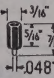


Fig. W

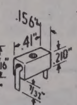


Fig. V

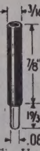


Fig. U

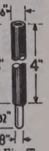


Fig. T

Cat. No.	See Fig.	Description	Net 1-49	50-99	100-999
71-105-0771-001	U	Short plug	$0.23	$0.21	$0.198
71-105-0751-001	V	3-Way jack	.10	.082	.770
71-105-0851-001	W	Chassis jack	.15	.13	.124

MOUNTING PLATE

Pre-punched aluminum plate for the accurate mounting of two Type 71-111-100 Binding Posts or two 71-108-900 Banana Jacks in 21/64" diameter holes on exact ¾" centers.

Cat. 71-111-0020-001 Mounting Plate **Net Each $0.03**

TEST PLUGS & JACKS

INSULATED BANANA PLUG
With Side Screw

HANDLE: MOLDED PHENOLIC plastic, Red, Black, Yellow, Green, Blue, White. SPECIFY COLOR

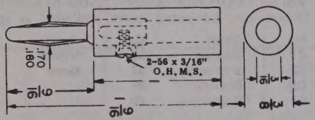
PLUG: Brass, nickel plated.

SPRING: Four-leaved phosphor bronze or beryllium copper, nickel plated.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.

DESCR.: Set screw secures wire without soldering. Fits standard banana jacks.

Std. Pkg. 100



No.	Spring	NET Per C
204	Phosphor Bronze	$28.00

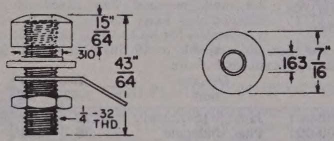
INSULATED BANANA JACK

HEAD: MOLDED PHENOLIC plastic, Red, Black, Yellow, Green, Blue, White. SPECIFY COLOR

BODY: Brass, nickel plated.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 4.0 pf.

DESCR.: Supplied with hex nut, fibre washer, and brass tinned lug. Mounts in 5/16″ hole in panels up to ⅜″ thick. Accepts standard banana plugs. **Std. Pkg. 100**



No.	NET Per C
205	$17.00

INSULATED BANANA PLUG

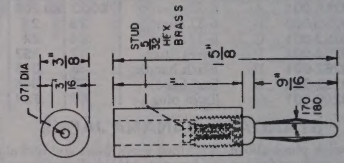
HANDLE: MOLDED PHENOLIC plastic, Red, Black, Yellow, Green, Blue, White. SPECIFY COLOR

PLUG: Brass, nickel or silver plated.

SPRING: Four-leaved phosphor bronze or beryllium copper, nickel or silver plated.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.

DESCR.: Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to plug for solderless connection. Fits standard banana jacks. **Std. Pkg. 100**



No.	Spring Material	Plating	NET Per C
211	Phosphor Bronze	Nickel	$28.00

INSULATED BANANA JACK
With Turret Terminal

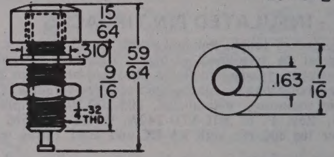
HEAD: MOLDED PHENOLIC plastic, Red, Black, Yellow, Green, Blue, White. SPECIFY COLOR

BODY: Brass, nickel plated.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 4.0 pf.

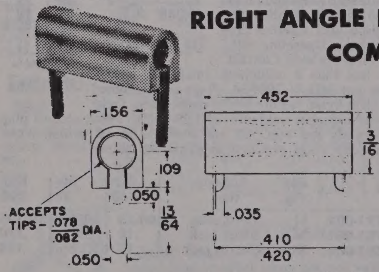
DESCR.: Supplied with hex nut & fibre washer. Mounts in 5/16″ hole in panels up to 5/8″ thick. Solder direct to turret terminal. Accepts standard banana plugs.

Std. Pkg. 100



No.	NET Per C
256	$20.00

RIGHT ANGLE PRINTED CIRCUIT TEST JACK COMMERCIAL TYPE



St. Pkg. 100

No.	NET per C
430	$13.00

(Add to Catalog Number as Required)

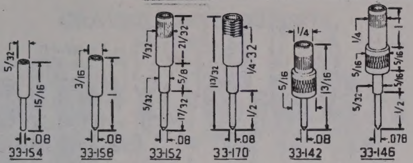
–101 WHITE –103 BLACK –105 BLUE –107 YELLOW –112 PURPLE
–102 RED –104 GREEN –106 ORANGE –108 BROWN –113 GREY

DESCR.: Double-entry design, probe inserts from either end of jack. Closed entry construction will not accept probes larger than .084″, will contact probes down to .074″. Closed bottom construction keeps jack from fouling with solder or flux. Locking ears hold jack firmly in board until soldered. Precise dimensions allow for automated assembly on boards.

RATINGS: 5 Amps AC for 10°C Temp. rise, continuous duty. 1.5 KV. 60 cycle AC continuous working voltage. Contact resistance 5 milliohms max. at rated current. Capacitance less than 5 MHz at 1 pf.

MOUNTING: Mounts in .052″ dia. holes, on .400″ centers, in boards up to 3⁄16″ thick. Can be spaced side-by-side .160″ on centers min.

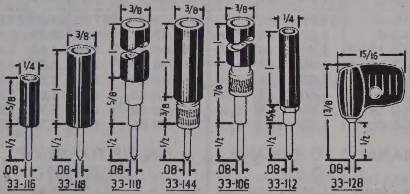
GC TEST PLUGS & JACKS



UNINSULATED PIN TIP PLUGS

Made of brass, nickel plated. Types 33-142, 33-146 and 33-152 are designed for press-fit into test prod handles.

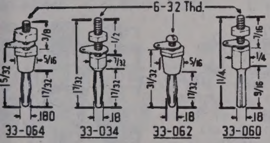
Cat. No.	Unit Description	Ea. 1-49	50-99	Net 100 1-4	5-9
59-33-154	Standard phone tip	$.05	$.05	$4.28	$3.86
59-33-142	Short solderless tip	.22	.20	18.57	16.71
59-33-146	Long solderless tip	.18	.17	15.00	13.50



INSULATED PIN TIP PLUGS

Metal parts are machined brass, nickel plated. Handles are unbreakable plastic. Suffix -1 indicates red, suffix -2 black.

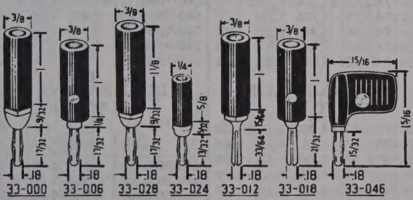
Cat. No.	Unit Description	Ea. 1-49	50-99	Net 100 1-4	5-9
59-33-116-1	Insulated phone tip	$.15	$.13	$12.00	$10.80
59-33-116-2	Insulated phone tip	.15	.13	12.00	10.80
59-33-118-1	Short, ins. phone tip	.19	.17	15.70	14.13
59-33-120-2	Short, ins. phone tip	.19	.17	15.70	14.13
59-33-144-1	Ins. solderless tip	.24	.22	19.98	17.99
59-33-144-2	Ins. solderless tip	.24	.22	19.98	17.99
59-33-106-1	Long ins. solderless tip	.21	.19	17.00	15.30
59-33-108-2	Long ins. solderless tip	.21	.19	17.00	15.30
59-33-128-1	Angle phone tip	.36	.33	30.00	27.00
59-33-130-2	Angle phone tip	.36	.33	30.00	27.00



UNINSULATED BANANA PLUGS

Machined from brass, nickel plated, 4-leaf types have silver plated, phosphor bronze spring contacts.

Cat. No.	Unit Description	Ea. 1-49	50-99	Net 100 1-4	5-9
59-33-064	4-leaf, stud mounting	$.30	$.28	$25.00	$22.50
59-33-034	4-leaf, stud mounting	.30	.28	25.00	22.50
59-33-062	4-leaf, screw mounting	.30	.28	25.00	22.50



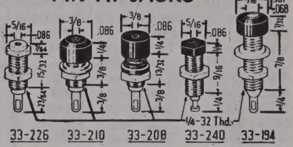
INSULATED BANANA PLUGS

Illustrated at bottom of column to the left. Machined from brass, nickel plated. 4-leaf types have silver plated, phosphor bronze spring contacts. Handles are unbreakable plastic. Suffix -1 indicates red handle, suffix -2 indicates black handle.

CONTINUED IN NEXT COLUMN

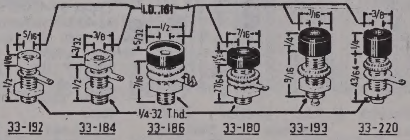
Cat. No.	Unit Description	Ea. 1-49	50-99	Net 100 1-4	5-9
59-33-000-1	4-leaf, solder type	$.36	$.33	$30.00	$27.00
59-33-002-2	4-leaf, solder type	.30	.28	25.00	22.50
59-33-006-1	4-leaf, set screw type	.30	.28	25.00	22.50
59-33-008-2	4-leaf, set screw type	.30	.28	25.00	22.50
59-33-028-1	4-leaf, solder type	.54	.50	45.00	40.50
59-33-028-2	4-leaf, solder type	.54	.50	45.00	40.50
59-33-012-1	Split, solder type	.28	.25	22.85	20.57
59-33-014-2	Split, solder type	.28	.25	22.85	20.57
59-33-018-1	Split, set screw type	.24	.22	20.00	18.00
59-33-020-2	Split, set screw type	.24	.22	20.00	18.00
59-33-046-1	Angle banana plug	.48	.44	40.00	36.00
59-33-048-2	Angle banana plug	.48	.44	40.00	36.00

PIN TIP JACKS



Metal parts are brass, nickel plated. Internal contacts are phosphor bronze. Insulating caps are plastic or nylon. Type 33-240 has all nylon body. Type 33-241 is nylon insulated, with a metal shell. Type 22-231 is an in-line jack. Type 33-194 accepts both pin tip and banana plugs. Suffix-1 is red, suffix-2, black.

59-33-226	Uninsulated	$.22	$.20	$18.57	$16.71
59-33-210-1	Standard tip jack	.22	.20	18.57	16.71
59-33-212-2	Standard tip jack	.22	.20	18.57	16.71
59-33-208-1	Standard tip jack	.33	.30	27.00	24.30
59-33-208-2	Standard tip jack	.33	.30	27.00	24.30
59-33-240-1	Nylon ins. tip jack	.29	.27	24.27	21.84
59-33-242-2	Nylon ins. tip jack	.29	.27	24.27	21.84
59-33-194-1	Pin tip/banana jack	.28	.55	22.85	20.57
59-33-196-2	Pin tip/banana jack	.28	.55	22.85	20.57

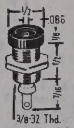


BANANA JACKS

Machined from brass, nickel plated. Insulated caps are molded plastic or nylon. Suffix -1 indicates red, suffix -2 black.

59-33-192	Uninsulated jack	$.18	$.17	$15.00	$13.50
59-33-184	Uninsulated jack	.18	.17	15.00	13.50
59-33-186-1	Plastic ins. jack	.22	.20	18.00	16.20
59-33-186-2	Plastic ins. jack	.22	.20	18.00	16.20
59-33-180-1	Plastic ins. jack	.18	.17	15.00	13.50
59-33-182-2	Plastic ins. jack	.18	.17	15.00	13.50
59-33-193-1	Ins. Jack, turret ter.	.21	.19	17.00	15.30
59-33-193-2	Ins. Jack, turret ter.	.21	.19	17.00	15.30
59-33-220-1	Miniature, nylon ins.	.30	.28	25.00	22.50
59-33-220-2	Miniature, nylon ins.	.30	.28	25.00	22.50

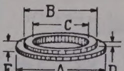
HIGH VOLTAGE JACKS



Type 33-216 has all nylon body with phosphor bronze contacts. Type 33-214 and 33-191 have two piece nylon insulating parts which nest together for long leakage paths. Suffix-1 red, suffix-2 black.

Cat. No.	Type Plug	Voltage Rating	Ea. 1-49	50-99	Net 100 1-4	5-9
59-33-216-1	Pin tip	5KV 60Hz ac	$.24	$.22	$20.00	$18.00
59-33-218-2	Pin tip	5KV 60Hz ac	.24	.22	20.00	18.00

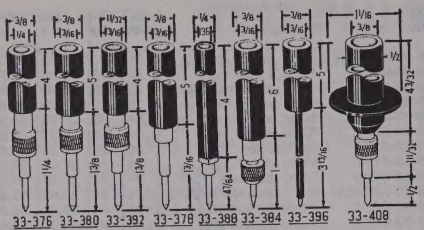
SHOULDER WASHERS



Extruded fiber washers for use in insulating all-metal types of pin tip and banana test jacks. Specify quantity when ordering.

Cat. No.	Dimensions					Net	Net
	A	B	C	D	E	Ea.	100
59-6529	5/8"	7/16"	3/8"	1/32"	1/16"	$0.02	$1.26

GC TEST PRODS



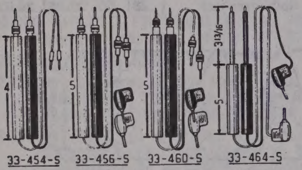
LONG TEST PRODS

Types 33-384 and 33-386 have replaceable phono needle. 33-408 and 33-410 for RF or high voltage probes, rated 15 KV. *Press fit tip. †Thread in tip. -1 indicated red, -2 indicated black.

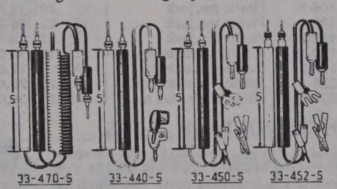
Cat. No.	Prod Tip	Type Handle	Ea. 1-49	50-99	Net 100 1-4	Net 100 5-9
59-33-376-1	Solderless	Fiber*	$.47	$.42	$38.55	$34.70
59-33-376-2	Solderless	Fiber*	.47	.42	38.55	34.70
59-33-380-1	Solderless	Plastic†	.40	.36	33.00	29.70
59-33-382-2	Solderless	Plastic†	.40	.36	33.00	29.70
59-33-392-1	Solderless	Plastic*	.36	.33	30.00	27.00
59-33-494-2	Solderless	Plastic*	.36	.33	30.00	27.00
59-33-378-1	Solder	Plastic†	.43	.39	35.67	32.10
59-33-378-2	Solder	Plastic†	.43	.39	35.67	32.10
59-33-388-1	Solder	Fiber†	.47	.42	38.55	34.70
59-33-388-2	Solder	Fiber†	.47	.42	38.55	34.70
59-33-384-1	Solder	Plastic†	.46	.42	38.00	34.20
59-33-386-2	Solder	Plastic†	.46	.42	38.00	34.20
59-33-396-1	Solder	Plastic†	.35	.31	28.57	25.71
59-33-398-2	Solder	Plastic†	.35	.31	28.57	25.71

TEST LEADS

Furnished in pairs, one red & one black. Types 33-450-S and 33-452-S are furnished with pin, spade and alligator clip adapter tips. Type 33-470-S has coiled cords, extends to 6 feet.



Cat. No.	Test Prod End	Test Unit End	Lead Lgth.	Net Pair
59-33-454-S	Solderless	Phone tips	50"	$0.85
59-33-456-S	Solderless	Solderless pins	50"	1.27
59-33-458-S	Solderless	Angle pin tips	50"	1.50
59-33-460-S	Phono needle	Solderless pins	50"	1.33
59-33-462-S	Phono needle	Angle pin tips	50"	1.50
59-33-464-S	Long reach	Angle pin tips	50"	1.65

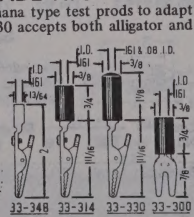


Cat. No.	Test Prod End	Test Unit End	Lead Lgth.	Net Pair
59-33-470-S	Solderless	Solderless pins	Coiled	$3.48
59-33-440-S	Solderless	Banana tips	50"	1.74
59-33-442-S	Solderless	Angle banana tips	50"	2.27
59-33-450-S	Solderless	Universal	50"	1.88
59-33-452-S	Needle point	Universal	50"	1.88
59-33-497-S	Alligator	Alligator	24"	.85

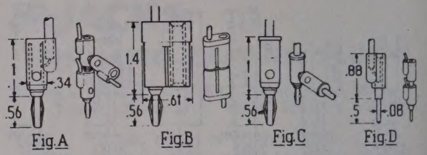
ALLIGATOR & SPADE TIPS

Types 33-314 and 33-300 accept banana type test prods to adapt to alligator or spade tips. Type 33-330 accepts both alligator and pin tip plugs. Plastic handles are available red (-1) or black (-2).

Cat. No.	Ea. 1-49	50-99	Net 100 1-4	Net 100 5-9
59-33-348	$.12	$.11	$9.98	$8.99
59-33-314-1	.16	.14	12.85	11.57
59-33-316-2	.16	.14	12.85	11.57
59-33-330-1	.61	.55	55.05	45.05
59-33-332-2	.61	.55	55.05	45.05
59-33-300-1	.17	.15	14.00	12.60
59-33-302-2	.17	.15	14.00	12.60



POMONA



POMONA PATCH CORDS

For general use in research, development and service. End connectors may be stacked vertically, or horizontally. Connecting wire is 20 AWG stranded (41 x 36) with flexible polyvinyl insulation. Nominal current rating 5 amps. Specify red or black when ordering.

BANANA TO BANANA (A) TO (A)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-B-4	$1.60	$1.44	$1.36
349-B-8	1.60	1.44	1.36
349-B-12	1.60	1.44	1.36
349-B-18	1.60	1.44	1.36
349-B-24	1.60	1.44	1.36
349-B-36	1.60	1.44	1.36
349-B-48	1.65	1.49	1.40
349-B-60	1.70	1.53	1.45

BANANA TO BANANA (C) TO (C)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-1440-4	$1.25	$1.13	$1.06
349-1440-8	1.25	1.13	1.06
349-1440-12	1.25	1.13	1.06
349-1440-18	1.25	1.13	1.06
349-1440-24	1.25	1.13	1.06
349-1440-36	1.25	1.13	1.06
349-1440-48	1.30	1.18	1.11
349-1440-60	1.35	1.23	1.16

BANANA TO PIN TIP (A) TO (D)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-1126-4	1.75	1.58	1.50
349-1126-8	1.75	1.58	1.50
349-1126-12	1.75	1.58	1.50
349-1126-18	1.75	1.58	1.50
349-1126-24	1.75	1.58	1.50
349-1126-36	1.75	1.58	1.50
349-1126-48	1.80	1.63	1.55
349-1126-60	1.85	1.68	1.60

BANANA TO BANANA (B) TO (B)

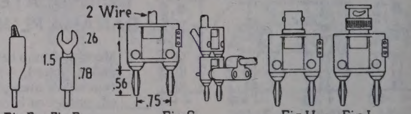
Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-HB-4	$1.85	$1.67	$1.57
349-HB-8	1.85	1.67	1.57
349-HB-12	1.85	1.67	1.57
349-HB-18	1.85	1.67	1.57
349-HB-24	1.85	1.67	1.57
349-HB-36	1.85	1.67	1.57
349-HB-48	1.90	1.72	1.62
349-HB-60	1.95	1.77	1.67

PIN TIP TO PIN TIP (D) TO (D)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-P-4	$1.75	$1.58	$1.50
349-P-8	1.75	1.58	1.50
349-P-12	1.75	1.58	1.50
349-P-18	1.75	1.58	1.50
349-P-24	1.75	1.58	1.50
349-P-36	1.75	1.58	1.50
349-P-48	1.80	1.63	1.55
349-P-60	1.85	1.68	1.60

CLIP TO CLIP (E) TO (E)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-1236-4	.95	.86	.81
349-1236-8	.95	.86	.81
349-1236-12	.95	.86	.81
349-1236-18	.95	.86	.81
349-1236-24	.95	.86	.81
349-1236-36	.95	.86	.81
349-1236-48	1.00	.91	.86
349-1236-60	1.05	.96	.91



SPADE TO SPADE (F) TO (F)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-1743-12	$1.40	$1.26	$1.19
349-1743-24	1.40	1.26	1.19
349-1743-36	1.40	1.26	1.19
349-1743-48	1.45	1.31	1.23
349-1743-60	1.50	1.35	1.28

BANANA TO CLIP (C) TO (E)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-1959-4	$1.25	$1.13	$1.06
349-1959-8	1.25	1.13	1.06
349-1959-12	1.25	1.13	1.06
349-1959-24	1.25	1.13	1.06
349-1959-36	1.25	1.13	1.06
349-1959-48	1.30	1.17	1.11
349-1959-60	1.35	1.22	1.15

SPADE TO CLIP (F) TO (E)

Cat. No. & Lgth."	Ea. 1-24	25-49	50-99
349-1960-12	$1.40	$1.26	$1.19
349-1960-24	1.40	1.26	1.19
349-1960-36	1.40	1.26	1.19
349-1960-48	1.45	1.31	1.23
349-1960-60	1.50	1.35	1.28

DUAL BANANA (G) TO (G)

	Ea. 1-9	10-24	25-49
349-2BA-18	4.95	4.46	4.21
349-2BA-24	4.95	4.46	4.21
349-2BA-36	4.95	4.46	4.21
349-2BA-48	4.95	4.46	4.21
349-2BA-60	4.95	4.46	4.21

Cat. No.	See Fig.	Adapter Type	Ea. 1-24	25-49	50-99
349-1269	H	Dual banana to BNC recept.	$3.25	$2.93	$2.76
349-1270	I	Dual banana to BNC plug	3.95	3.56	3.36

BINDING POSTS & ACCESSORIES

GRAYHILL BINDING POSTS

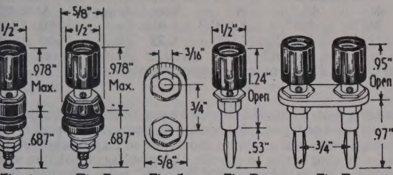


Fig. A Fig. B Fig. C Fig. D Fig. E

SCREW TYPE

h captive, molded thermosetting plastic heads, per MIL-M-14. pe CFG. Colors other than red or black type CMG. Metal parts nickel plated brass. Molded bosses fit round or "D" shaped es on up to 3/16" panels. Brass stem has .100" dia. thru-hole wire lead. Stem top has hole which accepts a standard banana t plug. *Specify red or black when ordering. †Specify white, low, blue, gray, green or brown caps when ordering. ‡Breakwn between metal stud and metal panel.

t.	See Fig.	Mtg. Hole	V-AC‡	Ea. 1-99	100-999	1M-1999	2M-2999
-29-1*	A	3/8"	1.5 KV	$0.50	$0.38	$0.35	$0.33
-29-1†	A	3/8"	1.5 KV	.55	.41	.39	.36
-29-3*	B	1/2"	3.0 KV	.50	.38	.35	.33
-29-3†	B	1/2"	3.0 KV	.55	.41	.39	.36

SPRING LOADED

nilar in appearance to Type 29-3 but with spring loaded head ich gives 24 ounces of contact force. *Specify red or black.

-29-33*	B	1/2"	3.0 KV	.50	.38	.35	.33

MOUNTING BASES (C)

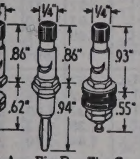
lded phenolic bases for mounting two or three Type 29-1 bind- posts on 3/4" centers. §Add suffix -1 for black, -2 for red.

-29B11-§	2 In-line	$0.15	$0.12	$0.11	$0.10
-29B32-§	3 In-line	.25	.19	.18	.16
-29B33-§	3 Triangular	.25	.19	.18	.16

PLUG BINDING POSTS

ad same as Type 29-1 posts. Bottom is standard banana type test g. Spring-loaded type exerts 24 oz. contact pressure. *Specired or black when ordering. See Fig. D and E.

.	Descrip-tion	Ea. 1-99	100-999	1M-1999	2M-2999
-29-41*	1, Standard	$0.60	$0.45	$0.42	$0.39
-29-43*	1, Spring-loaded	.60	.45	.42	.39
-29-42*	2, Standard	1.50	1.13	1.05	.98
-29-44*	2, Spring-loaded	1.50	1.13	1.05	.98

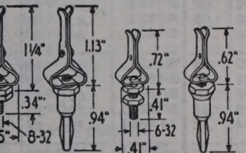


.A Fig. B Fig. C

PLUNGER TYPE POSTS

When button is depressed, and lead placed in slot, spring pressure assures firm positive contact. Metal parts are nickel plated brass. Button caps are polyethylene. Threaded studs are #8-32 UNC-2A for 11/64" mounting hole. Type 29-125 has stainless steel spring for use in high temperature areas. *Specify black or red when ordering.

.	See Fig.	Descrip-tion	Ea. 1-99	100-999	1M-1999	2M-2999
-29-110	A	No button cap	$0.40	$0.30	$0.28	$0.26
-29-100*	A	W/button cap	.45	.34	.32	.29
-29-125	A	Stainless sprg.	.45	.34	.32	.29
-29-104*	C	Insulated	.65	.49	.45	.42
-29-101*	B	Plug type	.65	.49	.45	.42



ig. D Fig. E Fig. G Fig. H

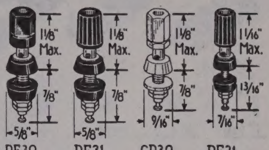
TEST CLIPS

For mounting on test equipment to allow fast connect/disconnect of the wire leads of resistors, condensers, etc. Clips are nickel plated brass. The threaded studs are nickel plated steel. Fig. E and H have banana test plug.

.	See Fig.	Descrip-tion	1-1999	2M-4999	5M-9999
-2-0	D	For up to 1/4" panel	$0.30	$0.26	$0.23
-2-1	E	With banana test plug	.45	.38	.34
-2-20	G	For up to 1/4" panel	.30	.26	.23
-2-21	H	With banana test plug	.30	.43	.38

SUPERIOR BINDING POSTS

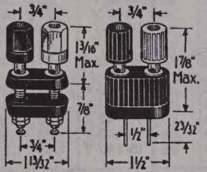
5-WAY TERMINATION GOLD PLATED



DF30 DF31 GP30 DF21

Captive head screws down to securely hold either wrap-around or feedthru wire leads up to #12 AWG, or a ¼" spade terminal. When head is retracted an alligator test clip may be attached to the center stem. The top of the post stem is drilled to accept a standard banana test plug. Insulated posts have gold-plated brass parts. Bases are equipped with centering bosses for round or "D" shaped holes in metal panels up to 3/16" thick. Insulated posts are molded nylon to MIL-P-20693 Specs. All metal type post is nickel plated brass. *When ordering add suffix -RC for red, -BLC for blue, -GNC for green, -WTC for white, -BC for black, or -YC for yellow to indicate color.

Cat. No.	Post Type	Max. A.	Wrkg. V.	Mtg. Hole	Stud Thd.	Ea. 1-99	100-999
27-DF30*	Insulated	30	1000	1/2"	10-32	$0.50	$0.38
27-DF31*	Insulated	30	1000	1/2"	10-32	.50	.38
27-GP30NC	All Metal	30	....	1/2"	10-32	.50	.38
27-DF21*	Insulated	30	1000	3/8"	6-32	.50	.38

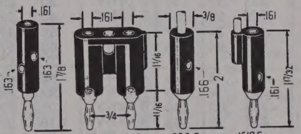


DF30-2 DAP15

DUAL POST ASSEMBLIES

Type DF30-2 has two Type DF30 binding posts on 3/4" centers on black insulators. Molded-in centering bosses are ½" diameter. **For post colors add suffix -BWTC for black and white, -BBC for both black, or -BRC for black and red. Model DAP15BWC has two DF31 binding posts on a black body with two contacts blades which fit the standard wall outlet receptacle.

Cat. No.	Type Unit	Max. A.	Wrkg. V.	Ea. 1-9	10-99
27-DF30-2**	Dual Post	30	1000	$1.10	$0.83
27-DAP15BWC	Adapter	30	1000	2.00	1.50



33-084 33-010 680 Ser. 1510 Ser.

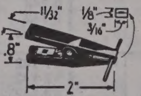
"CROSS-PATCH" PLUG & CORDS

Patch plugs fit standard banana jacks and accept other banana plugs on top or side. Type 33084 accepts banana plug on top and two on sides. Dual 33-010 is on 3/4" centers, accepts plugs on top. Patch cord type 680 accepts side plug, type 1510 both top and side. Patch cord connecting wire is 10,000 volt rated stranded copper. *Black or red only. †Black, red, yellow or green. Specify color when ordering.

Cat. No.	Descrip-tion	Ea. 1-49	Ea. 50-99	Net 100 1-4	Net 100 5-9
59-33-084-1	Plug only, red	$0.47	$0.42	$38.55	$34.70
59-33-084-2	Plug only, black	.47	.42	38.55	34.70
59-33-010	Dual plug, black	.87	.79	72.00	64.80

Cat. No.	Descrip-tion	Ea. 1-99	100-249	250-499
242-1510-8†	Cross-patch cord, 8" long	1.30	1.105	.91
242-1510-12†	Cross-patch cord, 12" long	1.30	1.105	.91
242-1510-24†	Cross-patch cord, 24" long	1.35	1.147	.945
242-1510-36†	Cross-patch cord, 36" long	1.40	1.19	.98

GRAYHILL
INSULATED TEST CLIP



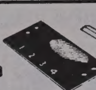
Complete insulation, including hinge pin, eliminates danger of shock or shorting to adjacent components. Molded phenolic body to MIL-M-14 specs. Brass contact is silver plated with .008" thick silver over-lay at point of contact. Contact resistance .0015 ohms. Tested at 500 volts.

Cat. 301-16B Black test clip
Cat. 301-16R Red test clip
Net Each **$1.40**

CINCH-JONES BARRIER TERMINALS

Standard

"Y" Series

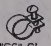

Marker Strip

Fanning Strip

"Y" Lug

"W" Lug

"3/4W" Lug


"CC" Clamp

BARRIER TERMINAL DIMENSIONS

Ter. Type	A	W	H	Screw Size	Max. Amps	Max. V-RMS	
140	3/8"	7/8"	13/32"	5-40	15	1100	1200*
141	7/16"	1-1/8"	1/2"	6-32	20	1100	1600*
142	9/16"	1-5/16"	5/8"	8/32	30	1600	2500*

*When used with marker strip beneath terminal strip.

Insulating bodies are black bakelite, with molded-in threaded brass eyelets and barriers between each terminal. Eyelets are recessed on bottom for insulating clearance. Barriers follow around the edge of the strips and continue to the base to provide long leakage paths and minimize shorts due to frayed wires. Binder head screws are nickel plated brass. Marker strips are suggested for use under terminal strips to provide higher voltage insulation when used on metal chassis. Terminal strips are available with "Y", "W" or "¾-W" lugs. When ordering "W" or "¾-W" types substitute these figures for "Y" in the catalog number below. Fanning strips facilitate quick connect/disconnect operation, eliminate error in connecting. "L" type is illustrated. For "R" type substitute "R" for "L" in catalog number below. Fanning strips are less cable clamp.

	STANDARD SERIES 140				WITH "Y" LUGS SERIES 140-Y				MARKER STRIPS SERIES MS-140				FANNING STRIPS SERIES 160-L			
No. Ter.	Cat. No. 14-★	Ea. 1-49	50-99	100-249	Cat. No. 14-★	Ea. 1-49	50-99	100-249	Cat. No. 14-★	Ea. 1-24	50-99	100-249	Cat. No. 14-★	Ea. 1-49	50-99	100-249
1	1-140	$0.17	$0.15	$0.13	1-140-Y	$0.20	$0.18	$0.15	....	...	...	...	....	...	...	...
2	2-140	.21	.18	.15	2-140-Y	.25	.22	.18	MS-2-140	$0.10	$0.09	$0.08	2-160-L	$0.23	$0.20	$0.17
3	3-140	.24	.20	.17	3-140-Y	.32	.26	.24	MS-3-140	.10	.09	.08	3-160-L	.28	.24	.20
4	4-140	.29	.25	.21	4-140-Y	.43	.37	.28	MS-4-140	.10	.09	.08	4-160-L	.35	.29	.24
5	5-140	.37	.30	.26	5-140-Y	.52	.44	.36	MS-5-140	.10	.09	.08	5-160-L	.41	.35	.27
6	6-140	.43	.37	.29	6-140-Y	.65	.53	.43	MS-6-140	.10	.09	.08	6-160-L	.46	.39	.29
7	7-140	.49	.42	.34	7-140-Y	.71	.61	.46	MS-7-140	.12	.10	.09	7-160-L	.53	.43	.35
8	8-140	.58	.47	.38	8-140-Y	.81	.68	.53	MS-8-140	.12	.10	.09	8-160-L	.58	.48	.40
9	9-140	.64	.51	.42	9-140-Y	.89	.76	.62	MS-9-140	.12	.10	.09	9-160-L	.66	.57	.43
10	10-140	.70	.60	.46	10-140-Y	1.02	.84	.67	MS-10-140	.13	.11	.10	10-160-L	.74	.62	.48
11	11-140	.75	.64	.49	11-140-Y	1.09	.90	.72	MS-11-140	.13	.11	.10	11-160-L	.80	.68	.54
12	12-140	.83	.69	.54	12-140-Y	1.18	1.01	.80	MS-12-140	.13	.11	.10	12-160-L	.90	.76	.61
13	13-140	.88	.75	.61	13-140-Y	1.28	1.08	.85	MS-13-140	.15	.13	.11	13-160-L	1.00	.83	.66
14	14-140	.96	.81	.65	14-140-Y	1.39	1.16	.91	MS-14-140	.15	.13	.11	14-160-L	1.03	.87	.69
15	15-140	1.04	.85	.68	15-140-Y	1.48	1.23	1.00	MS-15-140	.15	.13	.11	15-160-L	1.08	.90	.72
16	16-140	1.09	.90	.72	16-140-Y	1.56	1.30	1.05	MS-16-140	.17	.14	.12	16-160-L	1.17	1.00	.79
17	17-140	1.14	.96	.78	17-140-Y	1.66	1.40	1.11	MS-17-140	.17	.14	.12	17-160-L	1.20	1.02	.80
18	18-140	1.22	1.03	.81	18-140-Y	1.76	1.47	1.17	MS-18-140	.17	.14	.12	18-160-L	1.25	1.06	.84
19	19-140	1.27	1.07	.85	19-140-Y	1.85	1.54	1.23	MS-19-140	.19	.16	.13	19-160-L	1.32	1.12	.89
20	20-140	1.34	1.12	.88	20-140-Y	1.94	1.61	1.28	MS-20-140	.19	.16	.13	20-160-L	1.39	1.17	.91
21	21-140	1.42	1.18	.92	21-140-Y	2.04	1.71	1.35	MS-21-140	.19	.16	.13	21-160-L	1.47	1.22	.96
	SERIES 141				SERIES 141-Y				SERIES MS-141				SERIES 161-L			
1	1-141	.20	.18	.15	1-141-Y	.20	.18	.15	....	...	...	...	....	.....	.....	....
2	2-141	.22	.19	.16	2-141-Y	.30	.25	.23	MS-2-141	.10	.09	.08	2-161-L	.26	.21	.18
3	3-141	.29	.25	.20	3-141-Y	.43	.37	.28	MS-3-141	.10	.09	.08	3-161-L	.30	.26	.21
4	4-141	.40	.34	.27	4-141-Y	.58	.47	.38	MS-4-141	.10	.09	.08	4-161-L	.35	.29	.24
5	5-141	.47	.44	.36	5-141-Y	.69	.57	.45	MS-5-141	.12	.10	.09	5-161-L	.42	.37	.28
6	6-141	.54	.46	.38	6-141-Y	.80	.67	.51	MS-6-141	.12	.10	.09	6-161-L	.48	.41	.30
7	7-141	.65	.54	.43	7-141-Y	.92	.79	.63	MS-7-141	.12	.10	.09	7-161-L	.57	.47	.37
8	8-141	.72	.62	.48	8-141-Y	1.05	.87	.70	MS-8-141	.13	.11	.10	8-161-L	.61	.50	.42
9	9-141	.81	.68	.53	9-141-Y	1.16	.97	.78	MS-9-141	.13	.11	.10	9-161-L	.66	.57	.43
10	10-141	.89	.75	.71	10-141-Y	1.28	1.08	.86	MS-10-141	.13	.11	.10	10-161-L	.76	.63	.50
11	11-141	.97	.83	.66	11-141-Y	1.42	1.18	.92	MS-11-141	.15	.13	.11	11-161-L	.87	.72	.58
12	12-141	1.06	.87	.70	12-141-Y	1.53	1.27	1.03	MS-12-141	.15	.13	.11	12-161-L	.92	.79	.62
13	13-141	1.13	.93	.76	13-141-Y	1.66	1.40	1.11	MS-13-141	.17	.14	.12	13-161-L	1.32	1.09	.88
14	14-141	1.22	1.03	.82	14-141-Y	1.80	1.50	1.19	MS-14-141	.17	.14	.12	14-161-L	1.35	1.13	.90
15	15-141	1.29	1.09	.86	15-141-Y	1.91	1.59	1.27	MS-15-141	.19	.16	.13	15-161-L	1.44	1.19	.93
16	16-141	1.39	1.16	.91	16-141-Y	2.04	1.17	1.35	MS-16-141	.19	.16	.13	16-161-L	1.19	1.01	.79
17	17-141	1.47	1.23	1.00	17-141-Y	2.17	1.82	1.46	MS-17-141	.20	.17	.14	17-161-L	1.23	1.03	.81
18	18-141	1.55	1.29	1.04	18-141-Y	2.29	1.92	1.53	MS-18-141	.20	.17	.14	18-161-L	1.32	1.08	.88
19	19-141	1.63	1.38	1.09	19-141-Y	2.43	2.02	1.61	MS-19-141	.22	.18	.15	19-161-L	1.35	1.13	.90
20	20-141	1.72	1.45	1.09	20-141-Y	2.56	2.13	1.71	MS-20-141	.22	.18	.15	20-161-L	1.44	1.19	.93
	SERIES 142				SERIES 142-Y				SERIES MS-142				SERIES 162-L			
1	1-142	.22	.19	.16	1-142-Y	.27	.23	.19	....	...	...	...	....	....	.....	....
2	2-142	.26	.22	.18	2-142-Y	.38	.30	.26	MS-2-142	.10	.09	.08	2-162-L	.28	.24	.20
3	3-142	.36	.29	.24	3-142-Y	.51	.43	.33	MS-3-142	.10	.09	.08	3-162-L	.34	.27	.23
4	4-142	.47	.40	.32	4-142-Y	.69	.58	.45	MS-4-142	.12	.10	.09	4-162-L	.41	.35	.27
5	5-142	.58	.47	.39	5-142-Y	.83	.70	.56	MS-5-142	.12	.10	.09	5-162-L	.46	.39	.29
6	6-142	.68	.58	.45	6-142-Y	1.01	.83	.67	MS-6-142	.12	.10	.09	6-162-L	.58	.48	.40
7	7-142	.79	.66	.51	7-142-Y	1.14	.96	.78	MS-7-142	.13	.11	.10	7-162-L	.58	.48	.40
8	8-142	.88	.74	.60	8-142-Y	1.29	1.09	.85	MS-8-142	.13	.11	.10	8-162-L	.66	.57	.43
9	9-142	1.00	.82	.66	9-142-Y	1.46	1.20	.96	MS-9-142	.15	.13	.11	9-162-L	.70	.58	.47
10	10-142	1.10	.90	.72	10-142-Y	1.61	1.34	1.08	MS-10-142	.17	.14	.12	10-162-L	.79	.66	.53
11	11-142	1.19	1.01	.79	11-142-Y	1.77	1.48	1.17	MS-11-142	.17	.14	.12	11-162-L	.88	.74	.60
12	12-142	1.29	1.09	.85	12-142-Y	1.92	1.60	1.27	MS-12-142	.19	.16	.13	12-162-L	1.00	.83	.66
13	13-142	1.41	1.17	.92	13-142-Y	2.07	1.73	1.39	MS-13-142	.19	.16	.13	13-162-L	1.03	.87	.69
14	14-142	1.51	1.26	1.02	14-142-Y	2.23	1.86	1.49	MS-14-142	.20	.17	.14	14-162-L	1.08	.90	.72
15	15-142	1.61	1.34	1.08	15-142-Y	2.38	1.98	1.59	MS-15-142	.20	.17	.14	15-162-L	1.17	.69	.78
16	16-142	1.72	1.45	1.41	16-142-Y	2.56	2.13	1.69	MS-16-142	.23	.20	.16	16-162-L	1.20	1.02	.80
17	17-142	1.83	1.52	1.22	17-142-Y	2.69	2.25	1.81	MS-17-142	.25	.21	.17	17-162-L	1.25	1.06	.84

CINCH-JONES TERMINALS

Series 150 Barrier Terminals are similar to those listed on the preceding page but are designed for higher current, more rugged applications. When mounted on metal surfaces the maximum RMS voltage ratings can be increased by using an MS type marker strip beneath the terminal block. Series 540 Barrier Terminals have closed bottoms and require no marker strips to increase the RMS voltage rating. Knockouts are molded into the base so that "Y" terminals may be used where oonnections are to be made beneath the terminal strip. MSX Sèries Marker strips are used with the 540 Series Terminals. Barrier Terminals and Marker Strips are illustrated at right. ⋆Include entire Cat. No. when ordering.

BARRIER TERMINAL DIMENSIONS

Ter. Type	Dimensions A	W	H	Screw Size	Max. Amps	Max. V-RMS	
150	11/16"	1-13/16"	¾"	10-32	50	1700	2600*
151	7/8"	2"	15/16"	12-32	70	1800	3400*
152	1-1/8"	2½"	1-1/8"	1/4-28	90	2100	3800*
540	3/8"	1-1/8"	39/64"	5-40	15	2300	.....
541	7/16"	1-3/8"	11/16"	6-32	20	2800	.....
542	9/16"	1-5/8"	7/8"	8-32	30	4000	.....

*When used with marker strip beneath terminal strip.

150 SERIES BARRIER TERMINAL BLOCKS

TYPE 150 TERMINAL BLOCKS

lo. 'er.	Cat. No. 14-⋆	Ea. 1-49	50-99	100-249
1	1-150	$0.50	$0.43	$0.36
2	2-150	.70	.60	.46
3	3-150	1.00	.82	.66
4	4-150	1.27	1.07	.84
5	5-150	1.55	1.29	1.05
6	6-150	1.85	1.54	1.23
7	7-150	2.13	1.79	1.42
8	8-150	2.42	2.02	1.61
9	9-150	2.71	2.26	1.81
0	10-150	3.00	2.50	2.00

TYPE MS-150 MARKER STRIPS

MS-2-150	$.13	$.11	$.10
MS-3-150	.13	.11	.10
MS-4-150	.15	.13	.11
MS-5-150	.15	.13	.11
MS-6-150	.15	.13	.11
MS-7-150	.17	.14	.12
MS-8-150	.17	.14	.12
MS-9-150	.19	.16	.13
MS-10-150	.20	.17	.14

TYPE 151 TERMINAL BLOCKS

Cat. No. 14-⋆	Ea. 1-49	50-99	100-249
1-151	$0.75	$0.63	$0.49
2-151	1.26	1.06	.84
3-151	1.83	1.52	1.22
4-151	2.38	1.98	1.59
5-151	2.95	2.45	1.96
6-151	3.51	2.93	2.34
7-151	4.06	3.39	2.71
8-151	4.63	3.86	3.09
.....	....	....	....
.....	....	....	....

TYPE MS-151 MARKER STRIPS

MS-2-151	$.15	$.13	$.11
MS-3-151	.15	.13	.11
MS-4-151	.17	.14	.12
MS-5-151	.19	.16	.13
MS-6-151	.22	.18	.15
MS-7-151	.23	.20	.16
MS-8-151	.25	.21	.17
....	...	...	...
....	...	...	...

TYPE 152 TERMINAL BLOCKS

Cat. No. 14-⋆	Ea. 1-49	50-99	100-249
1-152	$1.44	$1.19	$1.01
2-152	2.11	1.76	1.45
3-152	2.88	2.39	1.97
4-152	3.65	3.05	2.56
5-152	4.42	3.69	3.10
6-152	5.20	4.33	3.64
.....	....	....	....
.....	....	....	....
.....	....	....	....
.....	....	....	....

TYPE MS-152 MARKER STRIPS

MS-2-152	$.15	$.13	$.11
MS-3-152	.19	.16	.13
MS-4-152	.22	.18	.15
MS-5-152	.25	.21	.17
MS-6-152	.28	.24	.19
....	...	...	...
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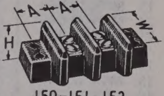
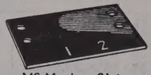
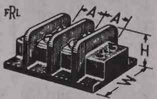


150-151-152



MS Marker Strip



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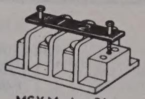

MSX Marker Strip

540 SERIES BARRIER TERMINAL BLOCKS

TYPE 540 TERMINAL BLOCKS

Cat. No. 14-⋆	Ea. 1-49	50-99	100-249
2-540	$0.46	$0.40	$0.32
3-540	.65	.53	.43
4-540	.79	.66	.52
5-540	.82	.69	.54
6-540	1.06	.87	.70
7-540	1.11	.93	.75
8-540	1.17	1.00	.79
9-540	1.28	1.08	.85
10-540	1.41	1.17	.92
11-540	1.52	1.27	1.03
12-540	1.63	1.38	1.09
13-540	1.76	1.47	1.17
14-540	1.88	1.56	1.25
15-540	1.98	1.66	1.31
16-540	2.11	1.76	1.41
17-540	2.23	1.86	1.49
18-540	2.34	1.95	1.55
19-540	2.45	2.04	1.63
20-540	2.58	2.16	1.72
21-540	2.69	2.24	1.80
22-540	2.80	2.34	1.88
23-540	2.93	2.44	1.59
24-540	3.05	2.55	2.02
25-540	3.15	2.64	2.11
26-540	3.28	2.73	2.19
27-540	3.39	2.82	2.26
28-540	3.51	2.93	2.34
29-540	3.62	3.03	2.42
30-540	3.75	3.12	2.49
31-540	4.83	3.86	3.21

TYPE MSX-540 MARKER STRIPS

MSX-2-540	$.13	$.11	$.10
MSX-3-540	.13	.11	.10
MSX-4-540	.13	.11	.10
MSX-5-540	.13	.11	.10
MSX-6-540	.13	.11	.10
MSX-7-540	.13	.11	.10
MSX-8-540	.13	.11	.10

TYPE 541 TERMINAL BLOCKS

Cat. No. 14-⋆	Ea. 1-49	50-99	100-249
2-541	$0.60	$0.48	$0.39
3-541	.70	.59	.46
4-541	.82	.69	.54
5-541	.92	.79	.63
6-541	1.11	.93	.75
7-541	1.19	1.01	.80
8-541	1.30	1.09	.86
9-541	1.44	1.19	.93
10-541	1.54	1.28	1.04
11-541	1.66	1.39	1.10
12-541	1.81	1.50	1.19
13-541	1.91	1.59	1.27
14-541	2.02	1.69	1.35
15-541	2.16	1.80	1.44
16-541	2.26	1.89	1.51
17-541	2.39	2.00	1.60
18-541	2.50	2.10	1.66
19-541	2.64	2.21	1.76
20-541	2.74	2.29	1.84
21-541	2.87	2.38	1.91
22-541	3.00	2.50	2.00
23-541	3.12	2.61	2.07
24-541	3.24	2.70	2.16
25-541	3.37	2.79	2.24
26-541	3.48	2.90	2.32
27-541	3.60	3.01	2.40
28-541	3.74	3.11	2.48
29-541	3.83	3.20	2.57
30-541	3.95	3.30	2.65
......	....	....	....

TYPE MSX-541 MARKER STRIPS

MSX-2-541	$.13	$.11	$.10
MSX-3-541	.13	.11	.10
MSX-4-541	.13	.11	.10
MSX-5-541	.13	.11	.10
MSX-6-541	.13	.11	.10
MSX-7-541	.13	.11	.10
MSX-8-541	.13	.11	.10

TYPE 542 TERMINAL BLOCKS

Cat. No. 14-⋆	Ea. 1-49	50-99	100-249
2-542	$0.63	$0.51	$0.42
3-542	.79	.66	.50
4-542	.92	.79	.63
5-542	1.09	.90	.72
6-542	1.24	1.05	.83
7-542	1.41	1.17	.92
8-542	1.55	1.29	1.05
9-542	1.71	1.44	1.14
10-542	1.88	1.55	1.24
11-542	2.02	1.69	1.35
12-542	2.18	1.82	1.46
13-542	2.34	1.59	1.55
14-542	2.49	2.07	1.66
15-542	2.65	2.22	1.77
16-542	2.80	2.34	1.88
17-542	2.96	2.47	1.79
18-542	3.11	2.60	2.07
19-542	3.28	2.72	2.18
20-542	3.43	2.87	2.29
21-542	3.58	3.00	3.38
22-542	3.75	3.12	2.49
23-542	3.90	3.26	2.60
24-542	4.04	3.38	2.70
25-542	4.21	3.51	2.80
26-542	4.37	3.64	2.91
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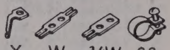
TYPE MSX-542 MARKER STRIPS

MSX-2-542	$.13	$.11	$.10
MSX-3-542	.13	.11	.10
MSX-4-542	.13	.11	.10
MSX-5-542	.13	.11	.10
MSX-6-542	.13	.11	.10
MSX-7-542	.15	.13	.11
MSX-8-542	.15	.13	.11

Continued on following page.

ACCESSORIES



SOLDER LUGS

For use with the barrier terminal as indicated by the end portion of the catalog number. "Y" lugs are used where connections are to be made to the bottom of the strip. See "Y" Series illustration on the preceding page.

Cat. No.	Ea. 1-49	50-99
14-Y-140	$0.11	$0.10
14-Y-141	.11	.10
14-Y-142	.12	.11
14-W-140	.11	.10
14-W-141	.11	.10
14-W-142	.12	.11
14-W-150	.19	.15
14-W-151	.25	.21
14-W-152	.45	.36
14-W-140-3/4	.11	.10
14-W-141-3/4	.11	.10
14-W-142-3/4	.12	.11

CABLE CLAMPS

Used with the Fanning Strips listed on the preceding page. The end number indicates the cable diameter in 16ths of an inch. In example: -4 indicates 4/16 or 1/4".

Cat. No.	Ea. 1-49	50-99
14-CC-161-4	$0.19	$0.15
14-CC-161-6	.25	.21
14-CC-161-8	.29	.25
14-CC-161-10	.35	.29
14-CC-161-12	.40	.34
14-CC-161-14	.44	.37

CINCH-JONES BARRIER TERMINALS

Continued From Preceding Page.

TYPE MSX-540

No. Ter.	Cat. No. 14-★	Ea. 1-49	50-99	100-249
9	MSX-9-540	$.13	$.11	$.10
10	MSX-10-540	.13	.11	.10
11	MSX-11-540	.15	.13	.11
12	MSX-12-540	.15	.13	.11
13	MSX-13-540	.15	.13	.11
14	MSX-14-540	.15	.13	.11
15	MSX-15-540	.15	.13	.11
16	MSX-16-540	.15	.13	.11
17	MSX-17-540	.17	.14	.12
18	MSX-18-540	.17	.14	.12
19	MSX-19-540	.17	.14	.12
20	MSX-20-540	.17	.14	.12
21	MSX-21-540	.17	.14	.12
22	MSX-22-540	.19	.16	.13
23	MSX-23-540	.19	.16	.13
24	MSX-24-540	.22	.18	.15
25	MSX-25-540	.22	.18	.15
26	MSX-26-540	.22	.18	.15
27	MSX-27-540	.22	.18	.15
28	MSX-28-540	.22	.18	.15
29	MSX-29-540	.23	.20	.16
30	MSX-30-540	.23	.20	.16
31	MSX-31-540	.23	.20	.16

★Include entire Cat. No. when ordering.

TYPE MSX-541

Cat. No. 14-★	Ea. 1-49	50-99	100-249
MSX-9-541	$13.	$.11	$.10
MSX-10-541	.13	.11	.10
MSX-11-541	.15	.13	.11
MSX-12-541	.15	.13	.11
MSX-13-541	.15	.13	.11
MSX-14-541	.15	.13	.11
MSX-15-541	.15	.13	.11
MSX-16-541	.17	.14	.12
MSX-17-541	.17	.14	.12
MSX-18-541	.17	.14	.12
MSX-19-541	.17	.14	.12
MSX-20-541	.17	.14	.12
MSX-21-541	.20	.17	.14
MSX-22-541	.20	.17	.14
MSX-23-541	.22	.18	.15
MSX-24-541	.22	.18	.15
MSX-25-541	.22	.18	.15
MSX-26-541	.22	.18	.15
MSX-27-541	.22	.18	.15
MSX-28-541	.23	.20	.16
MSX-29-541	.23	.20	.16
MSX-30-541	.23	.20	.16
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TYPE MSX-542

Cat. No. 14-★	Ea. 1-49	50-99	100-249
MSX-9-542	$.15	$.13	$.11
MSX-10-542	.15	.13	.11
MSX-11-542	.15	.13	.11
MSX-12-542	.17	.14	.12
MSX-13-542	.17	.14	.12
MSX-14-542	.17	.14	.12
MSX-15-542	.17	.14	.12
MSX-16-542	.20	.17	.14
MSX-17-542	.20	.17	.14
MSX-18-542	.20	.17	.14
MSX-19-542	.22	.18	.15
MSX-20-542	.22	.18	.15
MSX-21-542	.22	.18	.15
MSX-22-542	.22	.18	.15
MSX-23-542	.22	.18	.15
MSX-24-542	.23	.20	.16
MSX-25-542	.23	.20	.16
MSX-26-542	.23	.20	.16
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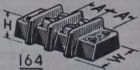
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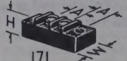
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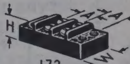
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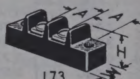

173

LIGHT DUTY BARRIER BLOCKS

164 SERIES

No. Ter.	Cat. No.	Ea. 1-49	50-99	100-249
1	14-1-164	$0.19	$0.16	$0.14
2	14-2-164	.22	.19	.16
3	14-3-164	.27	.23	.19
4	14-4-164	.37	.30	.24
5	14-5-164	.44	.38	.29
6	14-6-164	.50	.43	.36
7	14-7-164	.60	.48	.40
8	14-8-164	.67	.56	.44
9	14-9-164	.74	.63	.48
10	14-10-164	.82	.68	.53
11	14-11-164	.88	.74	.60
12	14-12-164	.96	.81	.65
13	14-13-164	1.05	.86	.69
14	14-14-164	1.12	.92	.75
15	14-15-164	1.19	1.01	.80
16	14-16-164	1.27	1.07	.85
17	14-17-164	1.34	1.12	.88
18	14-18-164	1.44	1.19	.93
19	14-19-164	1.50	1.25	1.01
20	14-20-164	1.58	1.31	1.06
21	14-21-164	1.66	1.39	1.10

172 SERIES

Cat. No.	Ea. 1-49	50-99	100-249
....	...	...	...
14-2-172	$0.43	$0.77	$0.29
14-3-172	.54	.46	.38
14-4-172	.68	.56	.44
14-5-172	.79	.66	.51
14-6-172	.89	.76	.62
14-7-172	1.04	.85	.68
14-8-172	1.13	.93	.76
14-9-172	1.25	1.06	.84
14-10-172	1.39	1.14	.90
14-11-172	1.49	1.24	1.01
14-12-172	1.60	1.34	1.08
14-13-172	1.72	1.45	1.14
14-14-172	1.84	1.53	1.23

173 SERIES

Cat. No.	Ea. 1-49	50-99	100-249
....	...	...	...
14-2-173	$0.24	$0.21	$0.17
14-3-173	.34	.27	.23
14-4-173	.44	.38	.29
14-5-173	.53	.44	.36
14-6-173	.63	.51	.42
14-7-173	.71	.61	.47
14-8-173	.80	.67	.53
14-9-173	.88	.75	.61
14-10-173	1.00	.81	.66

171 SERIES

Cat. No.	Ea. 1-49	50-99	100-249
....	...	...	...
14-2-171	$0.24	$0.20	$0.16
14-3-171	.29	.25	.20
14-4-171	.37	.30	.24
14-5-171	.43	.37	.28
14-6-171	.48	.41	.34
14-7-171	.54	.45	.37
14-8-171	.62	.49	.40
....	...	...	...
....	...	...	...

Ter. Type	---Dimensions--- A	W	H	Screw Size	Max. Amps	Max. V-RMS
164	3/8"	7/8"	13/32"	6-32	5	1100
171	1/4"	13/32"	5/16"	2-56	5	1000
172	1/4"	5/8"	5/16"	2-56	5	1000
173	3/8"	3/8"	1/2"	4-40	5	1000

For use in compact assemblies or where current and voltage requirements are comparatively low. Bodies are molded of black bakelite. Molded-in, threaded brass eyelets and binding head screws are nickel-plated. V-RMS rating is from under side to metal mounting surface. This may be increased considerably by inserting sheet insulation between block and mounting surface.

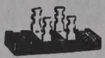
TIE POINTS

Used in electronic assemblies of all kinds for anchoring the leads of small components, interconnections, etc. Bakelite insulation. Tin-plated brass lugs.

SERIES 170

Base 5/16" wide, 1/4" thick. Terminals and mounting holes on 3/8" centers.

Cat. No.	No. Ter.	Ea. 1-49	50-99	100-249	250-499
14-1-170	1	$0.21	$0.18	$0.15	$0.14
14-2-170	2	.25	.22	.20	.19
14-3-170	3	.32	.27	.23	.22
14-4-170	4	.40	.30	.25	.24
14-5-170	5	.44	.38	.28	.27
14-6-170	6	.48	.42	.32	.29
14-7-170	7	.54	.46	.38	.34
14-8-170	8	.60	.50	.42	.40
14-9-170	9	.67	.54	.44	.43
14-10-170	10	.71	.60	.48	.46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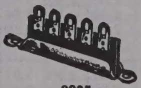
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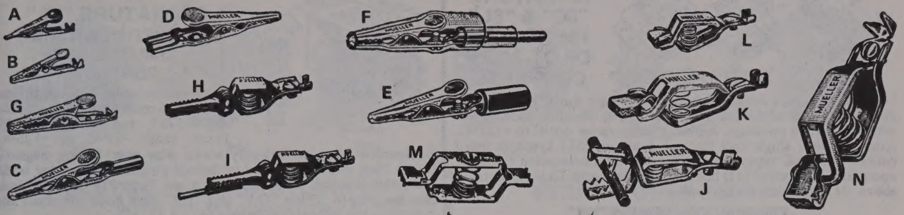
SERIES 2000

Steel bracket. Lugs on 5/16" centers.

Cat. No.	No. Ter.	Ea. 1-49	50-99	100-249	250-499
14-2002	2	$0.11	$0.10	$0.09	$0.08
14-2003	3	.12	.11	.10	.09
14-2004	4	.14	.12	.11	.10
14-2005	5	.14	.12	.11	.10
14-2006	6	.15	.13	.12	.11
14-2007	7	.15	.13	.12	.11
14-2008	8	.16	.14	.13	.12
14-2009	9	.17	.15	.14	.13
14-2010	10	.17	.15	.14	.13
14-2011	11	.19	.17	.15	.14
14-2012	12	.19	.17	.15	.14
14-2013	13	.22	.19	.16	.15

Detailed catalogs on these products and others not shown available on request.

MUELLER CLIPS



TEST & SERVICE CLIPS

MINI TYPES

For close quarters, printed circuits, etc. Maximum outside tip diameter 11/64". Steel type cadmium plated.

Cat. No.	Made Of	See Fig.	O'All Lgth.	Jaws Open	Ea. 1-9	Box 10	Box 100
41-34	Steel	A	1-3/32"	7/32"	$0.08	$0.52	$4.50
41-34-C	Copper	A	1-3/32"	7/32"	.10	.68	5.80
41-30	Steel	B	1-1/16"	3/16"	.09	.65	5.50
41-30-C	Copper	B	1-1/16"	3/16"	.11	.79	6.80

ALLIGATOR CLIPS

Most popular test clip. 60 series barrel accepts banana test plug, 60PR-2 accepts pin tip plug. 63 series equipped with two-piece inly insulator. "S" indicates screw terminal, all others solder connection. Steel types cadmium plated. *Red or black insulated handle.

41-60	Steel	C	2"	5/16"	$0.12	$0.83	$7.10
41-60-S	Steel	C	2"	5/16"	.14	.95	8.10
41-60-CS	Copper	C	2"	5/16"	.20	1.42	12.20
41-60PR-2	Steel	D	2"	5/16"	.17	1.20	10.30
41-60-HS*	Steel	E	2-11/16"	5/16"	.18	1.27	10.90
41-60-CHS*	Copper	E	2-11/16"	5/16"	.25	1.73	14.80
41-63	Steel	F	2-1/8"	1/4"	.25	1.76	15.10
41-63-C	Copper	F	2-1/8"	1/4"	.30	2.08	17.80
41-70	Steel	G	1-11/16"	5/16"	.09	.61	5.20
41-70-S	Steel	G	1-11/16"	5/16"	.10	.73	6.20
41-70-CS	Copper	G	1-11/16"	5/16"	1.7	1.20	10.30

CROCODILE CLIPS

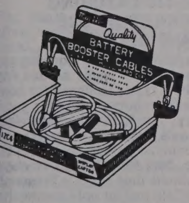
Model 85-T has pin tip probe on one jaw. Model 50-C has a sharp, insulation piercing needle on one jaw. All have screw terminal. Steel types are cadmium plated.

41-85	Steel	H	2-1/8"	5/16"	$0.14	$0.98	$8.00
41-85-C	Copper	H	2-1/8"	5/16"	.27	1.85	15.10
41-85-T	Steel	I	2-5/8"	5/16"	.36	2.50	20.30
41-50-C	Copper	J	2-1/4"	1/2"	.40	2.80	23.00
41-51-C	Copper	J	2-1/4"	1/2"	.28	2.00	17.00

GENERAL PURPOSE

Type 27-CG and 27-CGW are paired Geophone clips. Curved jaws clip onto seismograph cable rings for connecting geophone. Type 22 has jaws on both ends. Steel types cadmium plated. All have screw terminals.

41-45	Steel	L	1-1/2"	5/16"	$0.11	$0.77	$6.60
41-45-C	Copper	L	1-1/2"	5/16"	.20	1.39	11.30
41-48-B	Steel	K	2"	1/2"	.17	1.20	10.30
41-48-C	Copper	K	2"	1/2"	.25	1.72	14.70
41-27-CG	Copper	. .	2-7/16"	3/4"	.41	2.90	24.60
41-27-CGW	Copper	. .	2-7/16"	3/4"	.41	2.90	24.60
41-22	Steel	M	2"	13/32"	.17	1.20	10.30



BATTERY BOOSTER CABLES

A necessity for owners of cars with automatic transmissions. Easily and quickly attached to external battery when car battery is dead or low. Flexible, all-copper stranded conductors with rubber insulation. Conductors are crimped and soldered to Mueller HIPPO Clips. Heavy duty design for commercial and industrial users who want the best. Resistant to oil, grease and acids. Stays flexible, even in coldest weather. Furnished in pairs.

Cat. No.	O'All Lgth.	Conductors	Clips Used	Shpg. Lbs.	Net Pair
41-8A6	8 ft.	#6 (259 strands #30)	41-A	4.2	$7.80
41-12A6	12 ft.	#6 (259 strands #30)	41-A	5.2	10.20
41-12C4	12 ft.	#4 (413 strands #30)	41-C	6.5	16.80

HEAVY DUTY CLIPS

For high current test purposes, battery chargers, electro plating, etc. "C" types are copper. *Steel, cadmium plated. †Steel, lead plated. All have screw terminals. See Fig. N.

Cat. No.	Cur. Cap.	O'All Lgth.	Jaws Open	Ea. 1-9	Box 10	Box 100
41-27*	20 Amp.	2-7/16"	5/8"	$0.20	$1.40	$12.10
41-27-C	40 Amp.	2-7/16"	5/8"	.34	2.40	20.40
41-24-A†	25 Amp.	2-7/8"	3/4"	.34	2.40	20.30
41-25*	40 Amp.	3"	3/4"	.27	1.90	16.50
41-25-C	75 Amp.	3"	3/4"	.57	4.00	34.40
41-21-A†	50 Amp.	4"	1-1/16"	.61	4.30	36.50
41-21-C	100 Amp.	4"	1-1/16"	1.47	10.30	88.00
41-11-A†	100 Amp.	6"	1-5/8"	1.66	11.60	100.00
41-11-C	200 Amp.	6"	1-5/8"	2.89	20.20	173.00
41-33-C	300 Amp.	7-3/4"	2-1/4"	5.39	37.40	321.00

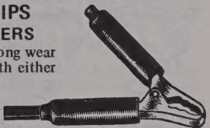
CLIP INSULATORS

Protection against shock and short circuits. They are tough and flexible, resistant to oils, acids and alkalies. Insulators cover entire clip. Available from stock in red and black. *Vinyl plastic types available on special order in yellow, blue, white and green at 10% additional cost.

Cat. No.	For Use With Clips Types	Net Ea.	Net 10	Net 100
41-13*	11-A & 11-C	$0.97	$6.80	$58.00
41-23*	21-A & 21-C	.48	3.40	29.00
41-26*	24-A, 25, 25-C	.33	2.30	20.00
41-29*	27 & 27-C	.20	1.42	12.20
41-32*	30 & 30-C	.05	.33	2.90
41-35	33-C	3.48	24.30	209.00
41-36*	34 & 34-C	.05	.33	2.90
41-47*	45 & 45-C	.08	.57	4.90
41-49*	48-B, 48-C, 50-C	.15	1.04	8.90
41-62*	60, 60-S, 60-CS	.06	.44	3.70
41-72*	70, 70-S, 70-CS	.06	.44	3.70
41-87*	85, 85-C, 85-T	.08	.57	4.90

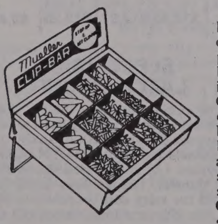
HIPPO & PIGMY CLIPS

FOR BATTERY CHARGERS



These rugged clips are designed for long wear on battery chargers. Both come with either red or black vinyl insulators. Type 41 is stamped with either (+) or (-). Springs are lead plated to prevent corrosion. Type 46 Pigmy is 3" x 7/16" wide. Type 41 Hippo is 6" x ¾" wide. Steel clips have bright copper plating. Type 41 has an optional solder lug which may be screwed on. Specify and add **$0.18.**

Cat.	Jaws	Description	Amps	Net Ea.
41-46-A	1-1/8"	Pigmy, Steel	50	$0.20
41-46-C	1-1/8"	Pigmy, Copper	75	.34
41-41-A	1-9/16"	Hippo, Steel	100	.70
41-41-C	1-9/16"	Hippo, Copper	200	1.86

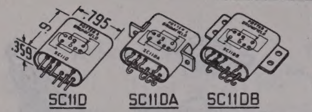


"CLIP BAR"

For those who use large numbers of clips. A 10½" x 13½" compartmented metal box with a hinged plastic cover on which identifying numbers are marked. Contains 500 fast selling small clips and insulators including Nos. 30/30-C/34/45/60-S/60-HS/60-CS/60-CHS/63/85 clips and Nos. 32/36/47/62/87 insulators. Consolidates your clip stock.

Cat.	Wt.	Net
41-110	10 Lbs.	$46.50

P & B MINIATURE RELAYS



MINIATURE "SC" & "SL" PM RELAYS DP-DT 2 AMP CONTACTS

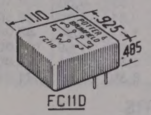
Permanent magnet relays for low power, high shock/vibration applications. They withstand 200g shock, 30g vibration to 2000 Hz with no contact openings. Ambient temp. range -65°C to +125°C. Available with single coil (SC) or dual coil (SL) types as listed below. Dual coil types may have coils series connected for polar operation. Case style 11D has pins on .200" grid. Case styles rated above. §Coil for one voltage only.

SINGLE COIL SERIES "SC"

Cat. No.	Coil Volts§	Coil Power	Ea. 1-24	25-50	51-99	100-249
90-SC11D	6-12-24 dc	1 watt	$20.60	$19.57	$18.54	$14.42
90-SC11DA	6-12-24 dc	1 watt				
90-SC11DB	6-12-24 dc	1 watt				

DUAL COIL LATCHING SERIES "SL"

Cat. No.	Coil Volts§	Coil Power	Ea. 1-24	25-50	51-99	100-249
90-SL11D	6-12-24 dc	1 watt	$22.50	$21.38	$20.25	$15.75
90-SL11DA	6-12-24 dc	1 watt				
90-SL11DB	6-12-24 dc	1 watt				



MINIATURE "FL-FC" FOR PRINTED CIRCUITS DP-DT 3 AMP CONTACTS

Plugs into and lies flat on .2" grid printed circuit board. Withstands 150G shock, 400G linear acceleration, 30G vibration to 2000 Hz. Ambient temp. range -65°C to +125°C. Hermetically sealed. Bifurcated contacts. Meets applicable section MIL-R-5757 and MSFC-SPEC-339. Pin length .25". Wt. .75 ozs.

DUAL-COIL LATCHING RELAY "FL"

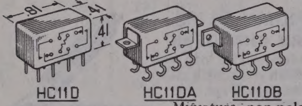
Operates by pulsing each coil alternately (observing polarity), or connecting coils in series from a reversing (polarized) voltage source. Remains latched without coil power. §Specify which.

Cat. No.	Coil Volts§	Coil Power	Ea. 1-24	25-50	51-99	100-249
90-FL11D	6-12-24 dc	.65 w.	$22.85	$21.71	$20.57	$16.00

SINGLE COIL LATCHING RELAY "FC"

Similar in appearance to "FL" but with a single coil Contacts operate when coil is energized. §Specify one coil voltage.

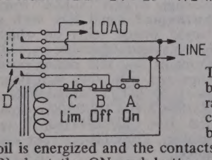
Cat. No.	Coil Volts§	Coil Power	Ea. 1-24	25-50	51-99	100-249
90-FC11D	6-12-24 dc	.65 w.	$20.35	$19.33	$18.32	$14.25
90-FC4037	MIL-R-5757D/ RY4ZZ4B3P		20.35	19.33	18.32	14.25



MINIATURE "HC-HCM" DP-DT 2 AMP CONTACTS

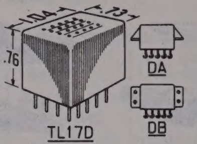
Miniature, non-polarized half-size crystal can relays for high reliability performance. Bifurcated, gold-plated silver DP-DT contacts rated 2 amps at 28 v-dc. Temp. range -65°C to +125°C. Hermetically welded case. HC series meets or exceeds all applicable sections of MIL-R5757E, and complies with MSFC-SPEC-339. Model HCM is the military version of Model HC. §Coil for one voltage only.

Cat. No.	Coil Volts	Coil Power	Ea. 1-24	25-50	51-99	100-249
90-HC11D	24 v-dc	.72 w.	$20.25	$19.24	$18.23	$14.18
90-HC11DA	24 v-dc	.72 w.				
90-HC-11DB	24 v-dc	.72 w.				
90-HCM-11D	24 v-dc	.72 w.	$13.55	$12.87	$12.20	$9.49
90-HCM11DA	24 v-dc	.72 w.				
90-HCM-11DB	24 v-dc	.72 w.				



ELECTRICAL LATCH CIRCUIT

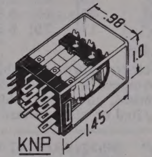
The circuit shown at the left can be used when the relay has a separate set of SP-ST-NO, or auxiliary contacts (D). When the ON push-button (A) is operated the relay coil is energized and the contacts transfer. The auxiliary contacts (D) short the ON push-button and the relay coil continues to be energized until the OFF push-button (B), or a limit switch (C) is operated to open the coil energizing circuit.



MINIATURE "TL" MAGNETIC LATCHING 4P-DT 3 AMP CONTACTS

For severe environmental conditions. Meets or exceeds applicable sections MIL-R-5757 and MSFC-SPEC-339. Temp. range -65°C to +125°C. Encapsulated in a hermetically sealed relay case. Strong magnetic forces keep contacts locked in desired position when relay is de-energized. Approx. 0.5 ms transfer time. Type "D" has .18" long pins for plug-in. Types "DA" and "DB" have hook terminals and mounting brackets as illustrated.

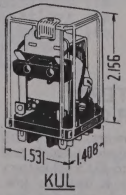
Cat. No.	Coil Volts	Coil Power	Ea. 1-24	25-50	51-99	100-249
90-TL17D	12-24 dc	1 watt	$33.35	$31.68	$30.02	$23.35
90-TL17DA	24 dc	1 watt				
90-TL17DB	24 dc	1 watt				



ENCLOSED "KNP" GENERAL PURPOSE 3 AMP CONTACTS

Recommended for use where chassis space is limited. Recognized under the Component Program of Underwriters' Laboratories, Inc., for ratings of 1/10 HP @120 vac; 3A@ 32 vac, resistine, or 3A@ 240 vac, 80% P.F. U/L file No. E22575. Contacts are fine silver cross bars for low resistance point contact. Terminals are .110" quick-connect/solder designed to fit solder or printed circuit sockets listed below. In clear polycarbonate dust cover. §For one coil voltage only, specify voltage when ordering. Nom. power 1.2 VA ac; 0.9 W dc.

Cat. No.	Coil Volts§	Contacts	Ea. 1-24	25-50	51-99	100-249
90-KNP5A21	6-12-24 ac	SP-DT	$3.80	$3.61	$3.42	$2.66
90-KNP5A21	120 ac	SP-DT	3.80	3.61	3.42	2.66
90-KNP5D21	6-12-24 dc	SP-DT	3.65	3.47	3.29	2.56
90-KNP5D21	110 dc	SP-DT	4.20	3.99	3.78	2.94
90-KNP11A21	6-12-24 ac	DP-DT	4.50	4.28	4.05	3.15
90-KNP11A21	120 ac	DP-DT	4.50	4.28	4.05	3.15
90-KNP11D21	6-12-24 dc	DP-DT	4.05	3.85	3.65	2.84
90-KNP11D21	110 dc	DP-DT	4.70	4.47	4.23	3.29
90-KNP14A21	6-12-24 ac	3P-DT	5.05	4.80	4.55	3.54
90-KNP14A21	120 ac	3P-DT	5.05	4.80	4.55	3.54
90-KNP14D21	6-12-24 dc	3P-DT	4.65	4.42	4.19	3.26
90-KNP14D21	110 dc	3P-DT	5.30	5.04	4.77	3.71
90-9KN1	Solder ter. socket		.70	....	....	....
90-9KN2	P.C. ter socket		.70	....	....	....

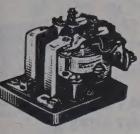


ENCLOSED "KUL" MAGNETIC LATCHING GENERAL PURPOSE 10 AMP RELAYS

Small, magnetic latching relays requiring approximately one-half the space needed for mechanical latching types. Designed for continuous duty in applications demanding good memory stability, the KUL relays are ideal for machine tools, process controls and business machines. Silver-cadmium oxide. contacts are rated 10 amps @ 28 v-dc, resistive, or 120 v-ac, 80% PF. All DP-DT relays include diodes inside the clear polycabonate dust cover. Terminals are for solder, or socket connection. §Coils are for only one of the voltages listed. Specify coil voltage when ordering.

Cat. No.	Coil Volts§	Contacts	Ea. 1-24	25-50	51-99	100-249
90-KUL5A15S	120 ac	SP-DT	$6.35	$6.03	$5.72	$4.45
90-KUL5D15S	24 dc	SP-DT	5.50	5.23	4.95	3.85
90-KUL11A15S	12-24-120 ac	DP-DT	7.15	6.79	8.24	5.01
90-KUL11D15S	12-24 dc	DP-DT	6.10	5.80	5.49	4.27

P & B POWER & GENERAL PURPOSE RELAYS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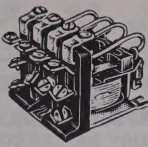
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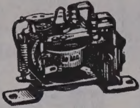
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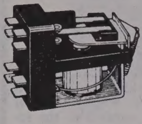
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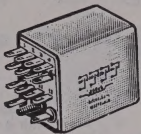
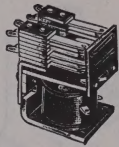

KHP


GA

HEAVY-DUTY POWER RELAY "PR"
WITH 25 AMP CONTACTS

or industrial control applications requiring long life, fast action nd reliability. Molded phenolic base with screw terminals. .312" ia. silver contacts. "Y" suffix types carry U/L label. "Y" A-C ypes only carry CSA label. #Coil for only one of voltages listed. With auxiliary SP-DT 5 amp. contacts. Base 2.5" x 3.375". Height .5". Power consumption: AC types 9,8 VA; DC types 2.0 watts. Double make.

at. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
0-PR1AY0	24 ac	SP-ST-NO	$4.75	$4.51	$4.28	$3.33
0-PR3AY0	6-12-24-120 ac	SP-ST-NO†	4.85	4.61	4.37	3.40
0-PR3AY0	208-240 ac	SP-ST-NO†	5.35	5.08	4.82	3.75
0-PR5AY0	6-12-24-120 ac	SP-DT	5.10	4.85	4.59	3.57
0-PR5AY0	208-240 ac	SP-DT	5.60	5.32	5.04	3.92
-PR7AY0	6-12-24-120 ac	DP-ST-NO	5.70	5.42	5.13	3.99
-PR7AY0	208-240 ac	DP-ST-NO	6.20	5.89	5.58	4.34
-PR11AY0	6-12-24-120 ac	DP-DT	7.50	7.13	6.75	5.25
-PR11AY0	208-240 ac	DP-DT	8.00	7.60	7.20	5.60
-PR11AY0	480 ac	DP-DT	8.95	9.45	8.96	6.97
0-PR3DY0	6-12-24 dc	SP-ST-NO†	4.85	4.61	4.37	3.40
0-PR3DY0	110 dc	SP-ST-NO†	5.55	5.27	5.00	3.89
0-PR5DY0	6-12-24 dc	SP-DT	5.10	4.85	4.59	3.57
0-PR5DY0	110 dc	SP-DT	5.80	5.51	5.22	4.06
0-PR7DY0	6-12-24 dc	DP-ST-NO	5.75	5.46	5.18	4.03
0-PR7DY0	110 dc	DP-ST-NO	6.45	6.13	5.81	4.52
0-PR11DY0	6-12-24 dc	DP-DT	7.50	7.13	6.75	5.25
0-PR11DY0	110 dc	DP-DT	8.20	7.79	7.38	5.74

WITH 25 AMP CONTACTS

0-PRA11AYA	12-24-120 ac	DP-DT*	9.15	8.69	8.24	6.41
0-PRA11AYA	240 ac	DP-DT*	9.65	9.17	8.69	6.76

MEDIUM POWER RELAY "PM"
WITH 25 AMP CONTACTS

compact, heavy-duty relay for polyphase switching, or motors up 1 HP. Molded phenolic end assembly with screw terminals. .250" a. silver-cadmium-oxide contacts. "Y" types U/L and CSA listed. Coil for only one of voltages listed. Base 2.657" x 3.394". Height 719". Power consumption 14 VA.

t. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
-PM17AY	6-12-24-120 ac	4P-DT	$14.35	$13.63	$12.92	$10.05
-PM17AY	240 ac	4P-DT	14.90	14.16	13.41	10.43
-PM17A	480 ac	4P-DT	15.80	15.01	14.22	11.06

MEDIUM POWER RELAY "MR"
WITH 8 AMP CONTACTS

or small motors, transmitters, general purpose, etc. .218" dia. ver contacts. #Coil for only one of voltages listed. *Double-ake, rated 10 amps. Solder lug terminals. Overall size 2.188" 2.969" x 2.0" high. Power used: AC 3.25 VA; DC 1.6 watts.

t. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
0-MR3A	6-24-120 ac	SP-ST-NO*	$4.75	$4.51	$4.28	$3.33
0-MR5A	6-12-24-120 ac	SP-DT	4.25	4.04	3.83	2.98
0-MR5A	240 ac	SP-DT	4.75	4.51	4.28	3.33
0-MR11A	6-12-24-120 ac	DP-DT	6.00	5.70	5.40	4.20
0-MR11A	240 ac	DP-DT	6.45	6.13	5.81	4.52
0-MR14A	6-12-24-120 ac	3P-DT	7.15	6.79	6.44	5.01
0-MR14A	240 ac	3P-DT	7.60	7.22	6.84	5.32
0-MR3D	6-12-24 dc	SP-ST-NO*	4.30	4.09	3.87	3.01
0-MR5D	6-12-24 dc	SP-DT	3.95	3.75	3.56	2.77
0-MR5D	110 dc	SP-DT	4.50	4.28	4.05	3.15
0-MR11D	6-12-24 dc	DP-DT	5.65	5.37	5.09	3.96
0-MR11D	110 dc	DP-DT	6.25	5.94	5.63	4.38
0-MR14D	6-12-24 dc	3P-DT	6.70	6.37	6.03	4.69
0-MR14D	110 dc	3P-DT	7.30	6.94	6.57	5.11

MEDIUM POWER RELAY "AB"
WITH 10 AMP CONTACTS

For appliance and general purpose use where rugged construction, long life and quiet operation are required. Tab terminals take snap-on connectors or may be applied to printed circuits by dip soldering. Furnished with snap-on screw adapters. Molded phenolic insulation. Silver contacts. "Y" types carry U/L component recognition and CSA listing. Size 1.406" x 3" x 1.937" high. #Coil for only one of voltages listed. Specify voltage when ordering. nition and CSA listing. Size 1.406" x 3" x 1.937" high. Power consumption: AC types 6.4VA; DC types 2W. #Coil for only one of voltages listed. Specify voltage when ordering.

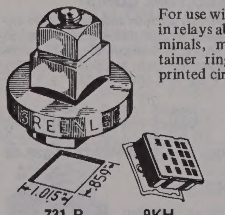
Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-AB11AY	6-24-120 ac	DP-DT	$6.20	$5.89	$5.58	$4.34
90-AB11AY	240 ac	DP-DT	6.70	6.37	6.03	4.69
90-AB11DY	12-24 dc	DP-DT	6.15	5.84	5.54	4.31
90-AB11DY	110 dc	DP-DT	6.65	6.65	6.32	5.99

COMPACT PLUG-IN "KHP" & "KHS"
WITH 3 AMP CONTACTS*

Small, rugged relays designed for the exacting requirements of data processing, computer and process control applications. KHP series has nylon dust cover, measures 1.109" x .659" x 1.281" high. Model KHS is hermetically sealed in metal cover measuring 1.156" x .906" x 1.265" high. *.093" gold-flashed silver contacts rated 3 amps at 30 v-dc or 120 v-ac resistive load. #Coil for only one of voltages listed. Specify when ordering. Power consumption: AC 1.2 VA; DC 900 milli-watts.

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-KHP17A11	6-12-24 ac	4P-DT	$5.60	$5.32	$5.04	$3.92
90-KHP17A11	120 ac	4P-DT	6.10	5.80	5.49	4.27
90-KHP17D11	6-12-24 dc	4P-DT	5.10	4.85	4.59	3.57
90-KHP17D11	48 dc	4P-DT	5.30	5.04	4.77	3.71
90-KHP17D11	90-110 dc	4P-DT	5.95	5.65	5.36	4.17
90-KHS17A11	6-12-24 ac	4P-DT	9.60	9.12	8.64	6.72
90-KHS17A11	120 ac	4P-DT	9.95	9.45	8.96	6.97
90-KHS17D11	6-12-24 dc	4P-DT	8.60	8.17	7.74	6.02
90-KHS17D11	110 dc	4P-DT	9.45	8.98	8.51	6.62

SOCKETS & PUNCH



731-R 9KH

For use with the KHP and KHS Series plug-in relays above. Model 9KH1 has solder terminals, mounts by means of spring retainer ring. Model 9KH2 is for use with printed circuit boards. The Greenlee Model 731-R socket Punch was made specially for use in shearing the 1.015" x .859" mounting hole for the 9HK1 socket.

Cat. No.	Description	Net Each
90-9KH1	Standard	$0.66
90-9KH2	Printed Ckt.	.66
58-731-R	Punch	16.25

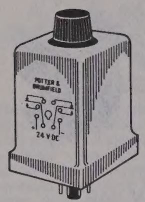
MULTIPLE CONTACT RELAY "GA"
WITH 5 AMP CONTACTS

Low-cost, medium power relay for universal applications. .062" dia. silver contacts. Laminated phenolic insulation. Solder lug terminals. #Coil for only one of voltages listed. Size 1.063" x 1.719" x 1.781" high. Power used: AC 6 VA

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-GA11A	6-12-24-120 ac	DP-DT	$4.05	$3.85	$3.65	$2.84
90-GA14A	24-120 ac	3P-DT	4.85	4.61	4.37	3.40
90-GA17A	6-12-24-120 ac	4P-DT	5.80	5.51	5.22	4.06
90-GA17A	240 ac	4P-DT	6.25	5.94	5.63	4.38

Note Series "GA" Relays are also available for DC operation. Price and delivery quoted on request.

POTTER & BRUMFIELD RELAYS



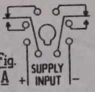


Fig. A

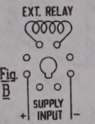


Fig. B

TIME DELAY RELAYS
SOLID STATE CIRCUITRY

Basic timing circuit consists of a resistor in series with a capacitor. When the input voltage is applied to the resistor-capacitor circuit, the voltage across the capacitor slowly increases. When the firing level is reached a solid state circuit energizes a switching relay or external load.

MODELS CDB-38 & CDD-38. Fig. A.

Provides delay on operate. Knob adjustable timing control and an internal relay with DP-DT contacts rated 10 amps at 125 v-ac. Accuracy ±5% of actual. Repeatability ±1%. Reset time 45-60 millisec. Polarity protection. Temp. range -40ºC to +55ºC. Plastic case is 1.750" x 2.375" x 2.875" high. Knob height .687". Wt. 8.25 oz.

Cat. No.	Input Volts	Delay Secs.	Ea. 1-9	10-24	25-49	50-99
90-CDB-38-70003	120 ac	0.1-10	$44.30	$42.09	$39.87	$35.44
90-CDB-38-70005	120ac	1.8-180	44.30	42.09	39.87	35.44
90-CDD-38-30003	24 dc	0.1-10	42.05	39.95	37.85	33.64
90-CDD-38-30005	24 dc	1.8-180	42.05	39.95	37.85	33.64

MODELS CDB-21 & CDD-21. Fig. B.

Provides delay on operate. Knob adjustable timing control but for use with an external relay. Accuracy ± 5% of actual. Repeatability ±1%. Reset time 45-60 milli-sec. Polarity protection. Temp. range -40ºC to +55ºC. Plastic case is 1.406" square x 2.00" high. Knob height, .562". Wt. 4.25 oz.

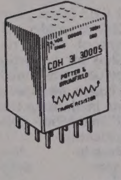
Cat. No.	Input Volts	Delay Sec.	Ea. 1-9	10-24	25-49	50-99
90-CDB-21-70003	120ac	0.1-10	$39.20	$27.24	$35.28	$31.36
90-CDB-21-70001	120ac	1.8-180	39.20	27.24	35.28	31.36
90-CDD-21-30003	24 dc	0.1-10	38.85	36.91	34.97	31.08
90-CDD-21-30001	24 dc	1.8-180	38.85	36.91	34.97	31.08

MODEL CHB-38. Fig. A.

Provides delay on operate, or (with*) delay on release. Knob adjustable timing control and an internal relay with DP-DT contacts rated 10 amps at 125 v-ac. Accuracy ± 10% of actual. Repeatability ±2%. Reset time 100-175 milli-sec. Polarity protection. Temp. range -10ºC. To +55ºC. Size 1.750" x 2.375" x 2.875" high. Knob height .687".

Cat. No.	Input Volts	Delay Sec.	Ea. 1-9	10-24	25-49	50-99
90-CHB-38-70001	120ac	1.0-10	$20.00	$19.00	$18.00	$16.00
90-CHB-38-70003	120ac	1.0-180	20.00	19.00	18.00	16.00
90-CHB-38-70011*	120ac	1.0-10	24.00	22.80	21.60	29.20
90-CHB-38-70013*	120ac	1.0-180	24.00	22.80	21.60	29.20
90-CHB-38-30001	24 ac	1.0-10	19.00	18.05	17.10	15.20
90-CHB-38-30003	24 ac	1.0-180	19.00	18.05	17.10	15.20

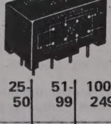
FIXED TIME CDH-31



Has fixed time of 180 seconds and requires an external relay. General characteristics similar to Model CDB-38 above. A 3-megohm variable resistor (not included) gives time intervals from 180 sec. to 1.8 sec. Case is 1.109" x .859" x 1.28" high.

Cat. No.	Input Volts	Ea. 1-9	10-24	25-49
90-CDH-31-30005	24 dc	$39.40	$37.43	$35.46

MINIATURE "HP"



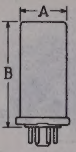
For TV cameras, dictating machines, desk top computers, etc. Nylon heat-sealed case only (HWL) .49" x .48" x .88". Pin terminals on a .200" grid for PC board or socket. DP-DT contacts rated 2 amps. Wt. .3oz. #Specify one.

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-HP11D	6-12-24 dc	DP-DT	$8.35	$7.93	$7.52	$5.84
90-9HP1	Socket for HP11D		Box of 10 Net $4.75			

60 HZ BUZZER "BU"

For test equipment, lab. use, etc. Measures only 1.031" x 1.375" x 1.031" high. Mounts with one 6-32 screw. Available for 6, 12, 24 or 120 v-ac. Specify coil voltage when ordering.

Cat. 90-BU 1-24 each $2.10, 25-50 each $2.00, 51-99 each $1.89, 100-249 each $1.47



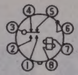


Fig.11

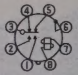


Fig.12

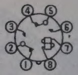


Fig.22

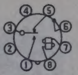


Fig.81

JM SERIES RELAYS
MERCURY WETTED CONTACTS

Basic component is a glass capsule containing the contact arrangement and a small resevoir of mercury hermetically sealed in a high pressure hydrogen atmosphere. This eliminates contact bounce, chatter, pits and sticking, and assures positive make or brake every time. Average operating time is 1 millisecond. Shock resistance 30G for 11 milliseconds, non-operating. Vibration up to 10G, 10-500 Hz. Temperature range -39ºC. to +105ºC.

SENSITIVE. SINGLE-SIDE STABLE

*Current to be applied to the coil winding for at least 2 seconds just prior to current flow tests. Relays are factory adjusted so they release when coil current is reduced to less than the "Ma-DC Open" values given. JML contact rating 500 v. max., 2 amps max., 100 VA max. with contact protection. Case: A=1.234"; B=2.640".

Cat. No. Case/Coil/Ter.	Ohms Res. ±10%	SOAK* Ma-DC	Operate Ma-DC Close	Open	Ea. 1-9	10-24	25-99
90-JML-1160-81	1000	8.1	2.21	0.38	$14.05	$10.48	$8.92
90-JML-1200-81	4000	3.4	1.25	0.25	15.00	11.19	9.53

SP-DT SINGLE COIL

JM1 contact rating 500 v. max., 5 amps max., 250 VA max. with contact protection. Case: A=1.05"; B=2.636".

Cat. No. Case/Coil/Ter.	Ohms Res. ±10%	Operate Ma-DC	V-DC	Max. V-DC	Ea. 1-9	10-24	25-99
90-JM1-106-12	40	67.7	2.98	9.0	$17.00	$12.68	$10.80
90-JM1-109-12	130	38.8	5.55	16.1	17.00	12.68	10.80
90-JM1-112-11	500	20.1	11.10	31.6	17.00	12.68	10.80
90-JM1-114-11	700	20.0	15.40	37.4	17.00	12.68	10.80
90-JM1-118-11	2500	10.1	27.80	70.7	17.30	12.91	10.99
90-JM1-119-11	4000	8.1	35.60	89.5	8.55	8.55	8.55

DP-DT SINGLE COIL

JM2 contact rating same as JM1. Case: A=1.531"; B=3.406".

90-JM2-104-22	50	110.0	6.04	12.25	$27.55	$20.55	$17.49
90-JM2-110-22	500	34.8	19.20	38.7	27.55	20.55	17.49
90-JM2-112-22	1250	22.1	30.40	61.2	27.55	20.55	17.49
90-JM2-115-22	5000	11.3	62.10	122.0	27.55	20.55	17.49

SP—DT JMS

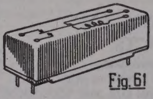
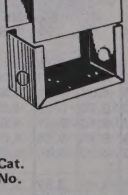


Fig.61

For printed circuit boards. Single coil. Contacts rated 500 v. max., 2 amps max., 100 VA max. with contact protection. Overall size (HWL) .625" x .625" x 2.062". *Bi-stable.

Cat. No. Case/Coil/Ter.	Ohms Res. ± 10%	Operate Ma-DC Close	Open	Ea. 1-9	10-24	25-99	100-249
90-JMF-1070-61	450	12.9	2.1	$11.40	$8.50	$7.24	$6.56
90-JMF-1080-61	675	11.6	1.9	11.40	8.50	7.24	6.56
90-JMF-1120-61	1425	8.4	1.4	11.40	8.50	7.24	6.56
90-JMF-1150-61	2400	7.8	1.3	11.40	8.50	7.24	6.56
90-JMF-1160-61	4000	4.0	0.67	11.95	8.91	7.59	6.87
90-JMF-5080-61*	675	+5.4	-5.4	11.40	8.50	7.24	6.56

DUST COVERS

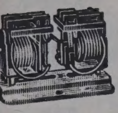


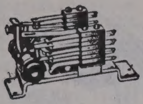
Made of sheet metal. Tops are removeable for access to relays. Bottom portions of covers, for MR, MS, PM and PR relays have knock-outs for cable entry.

Type	H.	W.	L.	Wt.
35D188	2.188"	1.250"	3.844"	6.5 oz.
9PM2	3.812"	3.812"	5.313"	7 ozs.
35D227	3.812"	3.812"	5.313"	1 lb.
35D013	3.125"	3.175"	5.312"	1 lb.
35D130	2.375"	2.594"	3.625"	7.5 ozs.

Cat. No.	Covers For	Ea. 1-24	35-50	51-99	100-249
90-35D188	BS, up to 6 Form C	$2.20	$2.09	$1.98	$1.54
90-9PM2	PM relays only, plastic	2.00	1.90	1.80	1.40
90-35D227	PM relays only, metal	3.45	3.28	3.11	2.42
90-35D013	PR relays only, metal	3.45	3.28	3.11	2.42
90-35D130	MS or MR relays	2.30	2.19	2.07	1.61

P & B SPECIAL PURPOSE RELAYS


KB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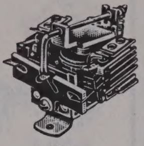
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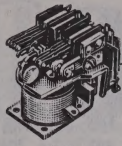
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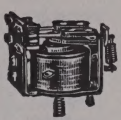
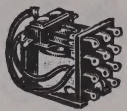

KT


KM

LATCHING "KB"

ELECTRICAL LATCH & RELEASE

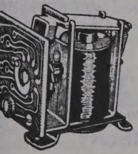
ses two coils of the same voltage. A momentary pulse to one coil perates relay to set the latch, and a momentary pulse to the her coil releases it. "Y" suffix types carry U/L and CSA labels. 25" dia. silver contacts. Size 2.13" x 1.812" x 3.22". #Coils r only one of listed. Specify when ordering.

WITH 5 AMP CONTACTS

at. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
)-KB17AY	6-12-24-120 ac	4P-DT	$12.25	$11.64	$11.03	$8.50
)-KB17AY	240 ac	4P-DT	13.15	12.49	11.84	9.21
)-KB23AY	24-120 ac	6P-DT	14.85	14.11	13.37	10.40
)-KB17D	6-12-24 dc	4P-DT	11.00	10.45	9.90	7.70
)-KB17D	110 dc	4P-DT	12.45	11.83	11.21	8.72
)-KB23D	24 dc	6P-DT	13.30	12.64	11.97	9.31

WITH 10 AMP CONTACTS

at. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
)-KB17AG	6-12-24-120 ac	4P-DT	$12.35	$11.73	$11.12	$8.65
)-KB17AG	240 ac	4P-DT	13.25	12.59	11.93	9.28
)-KB23AG	24-120 ac	6P-DT	14.85	14.11	13.37	10.40
)-KB17DG	6-12-24 dc	4P-DT	11.25	10.69	10.13	7.88
)-KB17DG	110 dc	4P-DT	12.70	12.07	11.43	8.89
)-KB23DG	24 dc	6P-DT	13.65	12.97	12.29	9.56
)-KB23DG	110 dc	6P-DT	15.10	14.35	13.59	10.57



"SA" STEPPER

1-POLE, 12-POSITIONS

.25 AMP CONTACTS

When pulsed an armature-driven pawl operates a ratchet wheel to drive a rotary moving contact arm in steps of 30° thru 12 positions. Power consumption 20 VA. Overall size 2.5" x 1.781" x 2.468" high. Weight 4 ounces.

t. .	Coil Volts	Contact Action	Ea. 1-24	25-50	51-99	100-249
-SA-IN-12A	120 ac	1P-12 Pos.	$7.36	$6.98	$5.43	$5.43

IMPULSE RATCHET "AP"

WITH 5 AMP CONTACTS

oltage pulse as short as 60 milli-sec gives positive ratchet action for alternate on/off or reversing operation. .187" dia. sil- contacts. Power consumption: AC 18.5 VA; DC 9 watts. Over- size 3.75" x 2.25" x 2.312". Wt. 7 oz. #For one voltage only.

t. .	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
-AP11A	6-12-24-120 ac	DP-DT	$10.20	$9.69	$9.18	$7.14
-AP11D	6-24 dc	DP-DT	10.20	9.69	9.18	7.14

IMPULSE LATCHING "PC"

WITH 7.5 AMP CONTACTS

oltage pulse as short as 601 milli-sec gives positive on/off or rrent reversal on alternate pulses. .125" dia. gold-flashed sil- r cadmium oxide contacts. Power consumption 18.5 VA. Overall ze 2.062" x 2.968" x 2.078" high. #For one voltage only.

at. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
)-PC11A	6-12-24-120 ac	DP-DT	$6.60	$6.27	$5.94	$4.62
)-PC17A	6-12-24 dc	4P-DT	15.80	15.01	14.22	11.06

IMPULSE/SEQUENCING "GM"

ALTERNATELY ON/OFF. 5 AMP CONTACTS

petetive pulses operate cam which gives alternate on/off contact tion. Phenolic insulation. Solder terminals. Overall size 1.437" 2.07" x 2.031" high. Power consumption 9.5 VA. #Coil for one ltage only. Specify voltage when ordering.

t. .	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
-GM11A	24-120 ac	DP-DT	$8.45	$8.03	$7.61	$5.92
-GM11AL11	120 ac	4P-DT	12.00	11.40	10.80	8.40

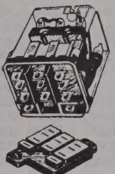
SUBMINIATURE "KM"

2 AMP CONTACTS

Used in small business machines, alarm systems, automatic toys and communications systems. .093" dia. silver contacts. Withstands 30G mechanical shock and .06" excursion 10 to 55 Hz mechanical vibration. Phenolic insulation. Solder terminals. Size .688" x 1.125" x .828" high. #Coil for only one of listed voltages.

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-KM5D	6-12-24 dc	SP-DT	$4.20	$3.99	$3.78	$2.94
90-KM11D	6-12-24 dc	DP-DT	4.60	4.37	4.14	3.22
90-KM14D	6-12-24 dc	3P-DT	5.30	5.04	4.77	3.71

GENERAL PURPOSE "KUP"



FOR INDUSTRIAL CONTROL

10 AMP CONTACTS

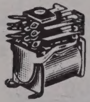
Equipped with .187" quick-connect/solder type terminals which also permit it to be used with sockets which also carry a 10 ampere rating. The relay is enclosed in a clear cellulose acetate case which is dust-proof. Silver-cadmium oxide contacts assure long life even under continuous operation. Overall size 1.531" x 1.405" x 1.906" high. Sockets are 1.50" x 1.370". #For one coil voltage only.

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-KUP5A15	6-12-24-120 ac	SP-DT	$4.15	$3.94	$3.74	$2.91
90-KUP5A15	240 ac	SP-DT	4.60	4.37	4.14	3.22
90-KUP5D15	6-12-24 dc	SP-DT	4.00	3.80	3.60	2.80
90-KUP5D15	110 dc	SP-DT	4.65	4.42	4.19	3.26
90-KUP11A15	6-12-24-120 ac	DP-DT	5.05	4.80	4.55	3.54
90-KUP11A15	240 ac	DP-DT	5.50	5.23	4.95	3.85
90-KUP11D15	6-12-24 dc	DP-DT	4.55	4.32	4.10	3.19
90-KUP11D15	110 dc	DP-DT	5.25	4.99	4.73	3.68
90-KUP14A15	6-12-24-120 ac	3P-DT	5.65	5.37	5.09	3.96
90-KUP14A15	240 ac	3P-DT	6.10	5.80	5.49	4.27
90-KUP14D15	6-12-24 dc	3P-DT	5.20	4.94	4.68	3.64
90-KUP14D15	110 dc	3P-DT	5.65	5.37	5.09	3.96
90-9KU1	Socket for KUP relays				Box/5	$4.00
90-9KU2	KUP prnt'd ckt. pin term. socket				Box/5	$4.75
90-9KU3	Hold down springs for KUP relays				Box/50	$5.50

300 OHM ANTENNA RELAY

Uses glass base insulation for minimum lossin switching 300 Ohms lines. .125" dia. gold-flashed silver contacts rated 5 amps. Size 1.625" x 1.25" x 1.687" high. #Coil for one voltage only.

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-KT11A	6-120 ac	DP-DT	$4.50	$4.27	$4.05	$3.15
90-KT11D	6-12 v-dc	DP-DT	4.50	4.27	4.05	3.15



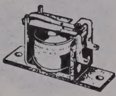
SUB-MINIATURE TELEPHONE RELAY "MG"

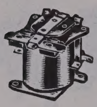
2 AMP CONTACTS

For aircraft, computer and other applications requiring good shock and vibration characteristics. Open types .687" x 1.062" x 1.25" high. †Sealed types have 3 #4-40 threaded studs on 1" x .5" ctrs. ‡Dust cover types have plug-in header which fits Amphenol 57-20140 or similar. .093" dia. silver contacts. #Coil for one voltage only.

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-MG11D	12-24 dc	DP-DT	$6.30	$5.99	$5.67	$4.41
90-MG11D	110 dc	DP-DT	6.75	6.41	6.08	4.73
90-MG17D	12-24 dc	4P-DT	8.45	8.03	7.61	5.92
90-MG17DP‡	12-24 dc	4P-DT	14.05	13.35	12.65	9.84
90-MG17DP‡	110 dc	4P-DT	14.75	14.01	13.28	10.33
90-MG17DT†	24 dc	4P-DT	15.35	14.58	13.82	10.75
90-MG17DT†	110 dc	4P-DT	16.00	15.20	14.40	11.20

POTTER & BRUMFIELD RELAYS


LB


RS

SM

PW

SENSITIVE "LB"
WITH 5 AMP CONTACTS

Top performance at low cost. Factory adjusted to operate on minimum current. .125" dia. silver contacts. Mounts by two .187" dia. holes on 2.218" ctrs. Size 1.25" x 2.656" x 1.375".

Cat. No.	Coil Ohms	Coil Ma.	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-LB5	2,500	9.0	SP-DT	$3.15	$2.99	$2.84	$2.21
90-LB5	5,000	6.3	SP-DT	3.35	3.18	3.02	2.35
90-LB5	10,000	4.5	SP-DT	3.55	3.37	3.20	2.49

MINIATURE SENSITIVE "RS"
WITH 2 AMP CONTACTS

Small, lightweight relay for radio-sound, light dimmer and model applications. Bar palladium contacts. Mounts by two 4-40 screws on diagonal. 75" x .625" ctrs. Size 1" x 1.171" x .937" high.

Cat. No.	Coil Ohms	Coil Ma.	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-RS5D	2,500	5.0	SP-DT	$3.35	$3.18	$3.02	$2.35
90-RS5D	5,000	3.5	SP-DT	3.65	3.47	3.29	2.56
90-RS5D	10,000	2.5	SP-DT	4.25	4.04	3.83	2.98
90-RS5D	335	6 v-dc	SP-DT	3.10	2.95	2.79	2.17
90-RS5D	1,350	12 v-dc	SP-DT	3.25	3.09	2.93	2.28

MINIATURE "SM"
WITH .25 AMP CONTACTS

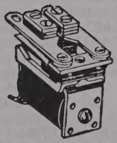
For light contact loads in computers, model airplanes or similar applications. Stationary contacts are silver, movable contacts rhodium. In hermetically sealed .785" dia. x 1.687" case with 7 pin miniature base. Specify coil when ordering. Wt. 1 oz.

Cat. No.	Coil Ohms	Coil Ma.	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-SM5LS	5,000	3.9	SP-DT	$8.35	$7.93	$7.52	$5.85
90-SM5LS	10,000	2.7	SP-DT	8.95	8.50	8.06	6.27
90-SM5DS	89	6 v-dc	SP-DT	8.05	7.65	7.25	5.64
90-SM5DS	360	12 v-dc	SP-DT	8.05	7.65	7.25	5.64
90-SM5DS	900	24 v-dc	SP-DT	8.05	7.65	7.25	5.64

PLUG-IN SENSITIVE "PW"
WITH 1 AMP CONTACTS

Precision, lightweight, hermetically sealed relay for aircraft and missile applications. Will withstand 10G vibration to 500 Hz. Size .765" dia. x 1.687" high. Has standard 7-pin miniature tube base. Specify coil ohms or voltage when ordering.

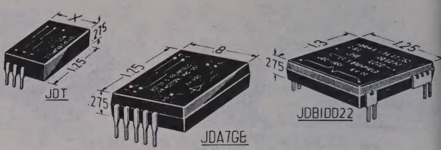
Cat. No.	Coil Ohms	Coil Ma.	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-PW5LS	5,000	2.8	SP-DT	$13.55	$12.87	$12.20	$9.49
90-PW5LS	10,000	2.0	SP-DT	14.00	13.30	12.60	9.80
90-PW5DS	202	6 v-dc	SP-DT	13.05	12.40	11.75	9.14
90-PW5DS	810	12 v-dc	SP-DT	13.05	12.40	11.75	9.14
90-PW5DS	3,240	24 v-dc	SP-DT	13.05	12.40	11.75	9.14



MINIATURE DC CONTACTOR "MB"
60 AMP CONTACTS

For very high current application. Relays will handle 150 amp surges for 6.3 seconds. Moving contact is .25" x .812" silver bar. Stationary contacts are .25" dia. silver on heavy brass. Size .843" x 1.625" x 1.375" high. Coil uses 2.7 watts. #For one voltage only.

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-MB3D	6 dc	SP-ST-NO-DB	$6.55	$6.22	$5.90	$4.59
90-MB3D	12-24 dc	SP-ST-NO-DB	6.70	6.37	6.03	4.69
90-MB3D	110 dc	SP-ST-NO-DB	7.15	6.79	6.44	5.01



JDT DUAL THIN-LINE
DRY REED RELAYS

For high density packaging applications. Epoxy-encapsulated hermetically sealed glass reed capsules. All have dual in-line terminal on .100" centers for PC board mounting. Contacts rated 10 watt resistive (50 v-dc or 0.5 amp. max.). Operate and release time 3. milliseconds. "X" dimension: 2 pole .600"; 4-pole .800"; 6 pol 1.100"; 8 pole 1.300". §Coil is for only one of the voltage listed Specify coil voltage when ordering.

Cat. No.	Coil Volts§	Con-tacts	Ea. 1-9	10-24	25-99	100-249
90-JDT7DA1	6-12 dc	2P-ST-NO	$5.80	$4.33	$3.68	$3.3
90-JDT7DA1	24 dc	2P-ST-NO	6.45	4.81	4.10	3.7
90-JDT15DB1	6-12 dc	4P-ST-NO	7.70	5.74	4.89	4.4
90-JDT15DB1	24 dc	4P-ST-NO	8.35	6.23	5.30	4.8
90-JDT21DC1	6-12 dc	6P-ST-NO	11.00	8.21	6.99	6.3
90-JDT21DC1	24 dc	6P-ST-NO	11.65	8.69	7.40	6.7
90-JDT27DD1	6-12 dc	8P-ST-NO	13.00	9.70	8.26	7.4
90-JDT27DD1	24 dc	8P-ST-NO	13.75	10.26	8.73	7.9

JDA SOLID STATE/REED
HYBRID RELAYS

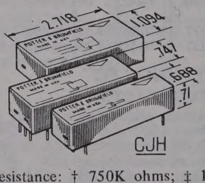
Designed to operate from output of DTL and TTL logic circuits Solid state driver sensitivity 100 microwatts, at control signal from 2.4 to 30 volts, with specified control volts applied. Release at 0.5 v-dc or less. Nominal power approx. 490 milliwatts i activated state. 2P-ST-NO reed contacts rated 10 watts max. resis tive (50 v-dc or 0.5 amp. max. switching) per contact. Terminal on .100" spacing for PC board mounting.

Cat. No.	Control Volts	Con-tacts	Ea. 1-9	10-24	25-99	100-249
90-JDA7GB1	2.4-30dc	2P-ST-NO	$15.30	$11.41	$9.72	$8.8

JDB SOLID STATE RELAY

For interfacing from solid state circuits providing DC signals intend ed to control 120 v-ac, 60 Hz loads such as fractional HP motor solenoids or contactors. SP-ST-NO solid state "contact" rated 1. amp-rms, 60 Hz max. @ 25°C ambient, or 1.0 amp-rms @ 55° ambient. Internal RC network provides dv/dt suppression, ye limits leakage to less than 1mA at 120 v-rms, 60 Hz. Nominal power 290 mW. Operate time 1 ms max., release time 10 ms max at nominal coil voltage. Terminals on .100" PC board spacin §Specify one coil voltage when ordering.

Cat. No.	Control volts§	Con-tacts	Ea. 1-9	10-24	25-99	100-249
90-JDB1DD22	6-12 dc	SP-ST-NO	$13.85	$10.33	$8.79	$7.
90-JDB1DD22	24 dc	SP-ST-NO	14.45	10.78	9.18	8.



ADJUSTABLE ON-DELAY TIMERS

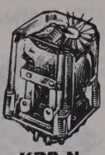
Solid state RC (resistor-capacito ON-DELAY timing devices whic use an accessory external potentic meter (¼ watt min.) to control th timing interval to ±10%. Ma resistance: † 750K ohms; ‡ 1.8 megohms. PC board terminal *Give complete Cat. No. when ordering, i. e., 90-CJH01-2001

Cat. 90-*	Delay in Seconds	Con-tacts	Coil Volts	Ea. 1-9	10-24
CJH01-20010	0.1-10†	SP-ST-NO	12 dc	$19.85	$18.8
CJH01-20120	1.0-120‡	SP-ST-NO	2 dc	22.60	21.4
CJH01-30010	0.1-10†	SP-ST-NO	4 dc	19.85	18.8
CJH01-30120	1.0-120‡	SP-ST-NO	4 dc	22.60	21.4
CJH02-20010	0.1-10†	SP-ST-NC	12 dc	20.50	19.4
CJH02-20120	1.0-120‡	SP-ST-NC	12 dc	23.25	22.0
CJH02-30010	0.1-10†	SP-ST-NC	24 dc	20.50	19.4
CJH02-30120	1.0-120‡	SP-ST-NC	24 dc	23.25	22.0
CJH03-20010	0.1-10†	SP-DT	12 dc	21.75	20.6
CJH03-20120	1.0-120‡	SP-DT	12 dc	24.50	23.2
CJH03-30010	0.1-10†	SP-DT	24 dc	21.75	20.6
CJH03-30120	1.0-120‡	SP-DT	24 dc	24.50	23.2

P & B GENERAL PURPOSE RELAYS

KRP

PLUG-IN SERIES "KRP"


KRP-N

Medium power relays housed in clear polycarbonate cases with octal-type base for easy installation or fast replacement. SP-DT and DP-DT types have 8-pin base, 3P-DT types have 11-pin base. Case size is 1.406" quare x 2" high. #Coil for only one of voltages listed. Specify oil voltage when ordering.

WITH 5 AMP CONTACTS

at. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
0-KRP5A	6-24-120 ac	SP-DT	$6.35	$6.03	$5.72	$4.45
0-KRP11A	6-12-24-120 ac	DP-DT	7.05	6.70	6.35	4.94
0-KRP11A	240 ac	DP-DT	7.50	7.13	6.75	5.25
0-KRP14A	6-12-24-120 ac	3P-DT	8.75	8.31	7.88	6.13
0-KRP14A	240 ac	3P-DT	9.20	8.74	8.28	6.44
0-KRP5D	6-12-24 dc	SP-DT	6.30	5.99	5.67	4.41
0-KRP5D	110 dc	SP-DT	7.00	6.65	6.30	4.90
0-KRP11D	6-12-24 dc	DP-DT	7.00	6.65	6.30	4.90
0-KRP11D	110 dc	DP-DT	7.70	7.32	6.93	5.39
0-KRP14D	6-12-24 dc	3P-DT	8.65	8.22	7.79	6.06
0-KRP14D	110 dc	3P-DT	9.35	8.88	8.42	6.55

WITH 10 AMP CONTACTS

0-KRP5AG	6-24-120 ac	SP-DT	6.50	6.18	5.85	4.55
0-KRP11AG	6-12-24-120 ac	DP-DT	7.30	6.94	6.57	5.11
0-KRP11AG	240 ac	DP-DT	7.75	7.36	6.98	5.43
0-KRP14AG	6-12-24-120 ac	3P-DT	9.10	8.65	8.19	6.37
0-KRP14AG	240 ac	3P-DT	9.55	9.07	8.66	6.70
0-KRP5DG	6-12-24 dc	SP-DT	6.45	6.13	5.81	4.52
0-KRP5DG	110 dc	SP-DT	7.15	6.79	6.44	5.01
0-KRP11DG	6-12-24 dc	DP-DT	7.25	6.89	6.53	5.08
0-KRP11DG	110 dc	DP-DT	7.95	7.55	7.16	5.57
0-KRP14DG	6-12-24 dc	3P-DT	9.00	8.55	8.10	6.30
0-KRP14DG	110 dc	3P-DT	9.70	9.22	8.73	6.79

INDICATOR RELAY "KRP-N"

INTERNAL NE-2 NEON. 10 AMP CONTACTS

nese are the same as the KRP Series listed above but include an E-2 Neon lamp connected across the relay coil terminals to act as fault indicator. #Coil for only one of voltages listed.

t. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
-KRP11AN	6-12-24-120 ac	DP-DT	$8.35	$7.93	$7.52	$5.85
-KRP11AN	240 ac	DP-DT	8.80	8.36	7.92	6.16
-KRP14AN	6-12-24-120 ac	3P-DT	10.15	9.64	9.14	7.11
-KRP14AN	240 ac	3P-DT	10.60	10.07	9.54	7.42
-KRP11DN	6-12-24-dc	DP-DT	8.25	7.84	7.43	5.78
-KRP11DN	110 dc	DP-DT	9.00	8.55	8.10	6.30

PLUG-IN RELAYS "KAP"

ries "KA" Relays in clear plastic cases with octal-type plug. DP pes are 8-pin, 3P types 11-pin. Case size 1.531" x 1.812" x 2.281" gh. "Y" types U/L listed. #Coil for only one of voltages listed.

WITH 5 AMP CONTACTS

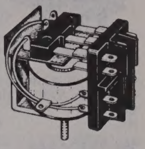
t. o.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
-KAP11AY	24-120 ac	DP-DT	$7.10	$6.75	$6.39	$4.97
-KAP11AY	240 ac	DP-DT	7.50	7.13	6.75	5.25
-KAP14AY	24-120 ac	3P-DT	8.75	8.31	7.88	6.13
-KAP14AY	240 ac	3P-DT	9.15	8.69	8.24	6.41
-KAP11DY	12-24 dc	DP-DT	7.05	6.70	6.35	4.94
-KAP11DY	110 dc	DP-DT	7.75	7.36	6.98	5.43
-KAP14DY	12-24- dc	3P-DT	8.65	8.22	7.79	6.06
-KAP14DY	110 dc	3P-DT	9.35	8.88	8.42	6.55

WITH 10 AMP CONTACTS

-KAP5AG	24-120 ac	SP-DT	6.45	6.13	5.81	4.52
-KAP11AG	6-24-120 ac	DP-DT	7.20	6.84	6.48	5.04
-KAP14AG	24-120 ac	3P-DT	8.90	8.46	8.01	6.23
-KAP5DG	24 dc	SP-DT	6.35	6.03	5.72	4.45
-KAP5DG	110 dc	SP-DT	7.05	6.70	6.35	4.94
-KAP11DG	24 dc	DP-DT	7.15	6.79	6.44	5.01
-KAP11DG	110 dc	DP-DT	7.85	7.46	7.07	5.50
-KAP14DG	24 dc	3P-DT	8.85	8.41	7.97	6.20
-KAP14DG	110 dc	3P-DT	9.55	9.07	8.60	6.69

LOW COST "KA"

For low power loads such as small motors, solenoids, other relays, or general automation. .125" dia. gold-flashed moving contacts, .156" dia. silver overlay stationary contacts. "G" suffix types have silver-cadmium-oxide moving contacts. U/L component recognition. Overall size 1.468" x 1.843" x 1.687" high. Power consumption: AC 2VA; DC 1.2 watts. #Coil for only one of voltages listed.


KA

WITH 5 AMP CONTACTS

Cat. No.	Coil Volts#	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-KA5AY	6-12-24-120 ac	SP-DT	$3.75	$3.56	$3.38	$2.63
90-KA5AY	240 ac	SP-DT	4.25	4.04	3.83	2.98
90-KA11AY	6-12-24-120 ac	DP-DT	4.55	4.32	4.10	3.19
90-KA11AY	240 ac	DP-DT	4.95	4.70	4.46	3.47
90-KA14AY	6-12-24-120 ac	3P-DT	4.95	4.70	4.46	3.47
90-KA14AY	240 ac	3P-DT	5.45	5.18	4.91	3.82
90-KA5DY	6-12-24 dc	SP-DT	3.60	3.42	3.24	2.52
90-KA5DY	110 dc	SP-DT	4.30	4.09	3.87	3.01
90-KA11DY	6-12-24 dc	DP-DT	4.00	3.80	3.60	2.80
90-KA11DY	110 dc	DP-DT	4.70	4.47	4.23	3.29
90-KA14DY	6-12-24 dc	3P-DT	4.50	4.28	4.05	3.15
90-KA14DY	110 dc	3P-DT	5.20	4.94	4.68	3.64

WITH 10 AMP CONTACTS

90-KA5AG	6-12-24-120 ac	SP-DT	3.80	3.61	3.42	2.66
90-KA5AG	240 ac	SP-DT	4.30	4.09	3.87	3.01
90-KA11AG	6-12-24-120 ac	DP-DT	4.65	4.42	4.19	3.26
90-KA11AG	240 ac	DP-DT	5.05	4.80	4.55	3.54
90-KA14AG	6-12-24-120 ac	3P-DT	5.15	4.89	4.64	3.61
90-KA14AG	240 ac	3P-DT	5.65	5.37	5.09	3.96
90-KA5DG	6-12-24 dc	SP-DT	3.65	3.47	3.29	2.56
90-KA5DG	110 dc	SP-DT	4.35	4.13	3.92	3.05
90-KA11DG	6-12-24-dc	DP-DT	4.15	3.94	3.74	2.91
90-KA11DG	110 dc	DP-DT	4.85	4.61	4.37	3.40
90-KA14DG	6-12-24 dc	3P-DT	4.70	4.47	4.23	3.29
90-KA14DG	110 dc	3P-DT	5.40	5.14	4.86	3.78

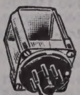
PLUG-IN SENSITIVE "KCP"

Similar in appearence to Model KRP at upper lift. Clear polycarbonate case is 1.406" square x 2.0" high. SP-DT and DP-DT types have 8-pin octal base, 3P-DT types 11-pin base. Contacts are gold flashed over .125" dia. silver. Specify coil ohms when ordering.

WITH 2 AMP CONTACTS

Cat. No.	-------Coil------- Ohms	Ma.	Contact Action	Ea. 1-24	25-50	51-99	100-249
90-KCP5	2,500	7.2	SP-DT	$6.90	$6.56	$6.21	$4.83
90-KCP5	5,000	5.0	SP-DT	7.00	6.65	6.30	4.90
90-KCP5	10,000	3.6	SP-DT	7.45	7.08	6.71	5.22
90-KCP11	2,500	10.0	DP-DT	7.35	6.98	6.62	5.15
90-KCP11	5,000	7.2	DP-DT	7.45	7.08	6.71	5.22
90-KCP11	10,000	5.0	DP-DT	7.90	7.51	7.11	5.53
90-KCP14	2,500	12.3	3P-DT	9.05	8.60	8.15	6.34
90-KCP14	5,000	8.7	3P-DT	9.15	8.69	8.24	6.41
90-KCP14	10,000	6.1	3P-DT	9.60	9.12	8.64	6.72

PLUG-IN CASE



Used for assembling plug-in circuit modules. Clear polycarbonate case is 1.406" square by 2" high.

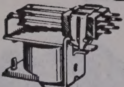
Cat. No.	Base Plug	Ea. 1-24	25-50	51-99
90-35DO70	8-pin octal	$0.70	$0.67	$0.63
90-35DO72	11-pin octal	.85	.81	.77

HOLD DOWN SPRING

For use with the KRP and DCP Series Relays to hold them securely in place and prevent them from working loose when exposed to severe shock or vibration. Consists of a stainless steel wire which snaps in place over the top of the relay case.

Cat. 90-9-KR-15 Box of 50 **Net $6.00**

GUARDIAN

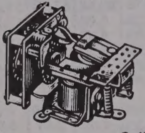


SERIES 900/910 RELAYS
10 AMP CONTACTS

Modern design incorporates a minimum number of parts for long, trouble-free service. Has molded switches, one-piece mounting clip and return spring, molded bobbin and coil cover. Size 2.687" x 1.687" x 1.781". Average shpg. wt. 6 oz. U/L recognized.

Cat. No.	— Coil — Volts	Ohms	Contacts	Ea. 1-9	10-24	25-49
159-900-2C-24A	24 ac	24	DP-DT	$2.00	$1.90	$1.75
159-900-2C-120A	120 ac	550	DP-DT	2.00	1.90	1.75
159-910-2C-24A	24 ac	24	DP-DT*	2.00	1.90	1.75
159-910-2C-120A	120 ac	550	DP-DT*	2.00	1.90	1.75
159-905-2C-6D	6 dc	8	DP-DT	2.00	1.90	1.75
159-905-2C-12D	12 dc	32	DP-DT	2.00	1.90	1.75
159-905-2C-24D	24 dc	130	DP-DT	2.00	1.90	1.75

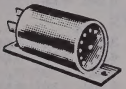
*With quick disconnect terminals, all others solder lug.



24 POINT STEPPER

100 millisecond pulses step to 24 points (22 active) with electrical reset. Maximum steps per second is 20. Contacts are rated 1.5 amps resistive, at 120 v-ac, 60 Hz. Overall size (LWH) 2.186" x 3.312" x 2.186". Shpg. wt. 11.5 oz.

Cat. No.	Coil V.	No. Points	Ea. 1-24	25-49	50-99	100-249
159-MER-120AC	120 ac	24	$19.30	$17.37	$16.41	$13.51

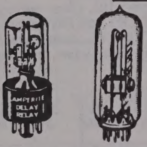


ROTOMATIC STEPPER

For continuous rotation of 12 positions. Contacts rated 3 amps resistive, or 1 amp inductive loads. Shpg. wt. 5 oz.

Cat. No.	No. Points	Coil V.	Ea. 1-24	25-49	50-99	100-249
159-705-12P-6D	12	6 dc	$7.55	$6.80	$6.42	$5.29
159-705-12P-12D	12	12 dc	7.55	6.80	6.42	5.29
159-705-12P-24D	12	24 dc	7.55	6.80	6.42	5.29

AMPERITE



THERMAL TIME DELAYS

Plug-in, glass enclosed, heater actuated, bi-metallic time delays for a-c or d-c operation. Heaters consume 2 watts. SP-ST contacts rated: octal, 3 amps at 115 v-ac, 9-pin miniature 2 amps at 115 v-ac. Temperature range -55°C to +70°C. Recycling time is 50% of delay time.

OCTAL BASE. 1¼" DIA. X 2-7/8"

Normally Open 6 v. Htr. Cat. No.	Normally Open 115 v. Htr. Cat. No.	Time Delay Sec.	Normally Closed 6 v. Htr. Cat. No.	Normally Closed 115 v. Htr. Cat. No.
140-6NO2	140-115NO2	2	140-6C2	140-115C2
140-6NO5	140-115NO5	5	140-6C5	140-115C5
140-6NO10	140-115NO10	10	140-6C10	140-115C10
140-6NO15	140-115NO15	15	140-6C15	140-115C15
140-6NO20	140-115NO20	20	140-6C20	140-115C20
140-6NO30	140-115NO30	30	140-6C30	140-115C30
140-6NO45	140-115NO45	45	140-6C45	140-115C45
140-6NO60	140-115NO60	60	140-6C60	140-115C60
140-6NO75	140-115NO75	75	140-6C75	140-115C75
140-6NO90	140-115NO90	90	140-6C90	140-115C90
140-6NO120	140-115NO120	120	140-6C120	140-115C120

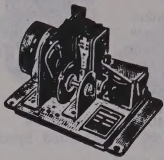
9-PIN MIN. BASE. 7/8" DIA. X 2-3/8"

Normally Open 6 v. Htr. Cat. No.	Normally Open 115 v. Htr. Cat. No.	Time Delay Sec.	Normally Closed 6 v. Htr. Cat. No.	Normally Closed 115 v. Htr. Cat. No.
140-6NO2T	140-115NO2T	2	140-6C2T	140-115C2T
140-6NO5T	140-115NO5T	5	140-6C5T	140-115C5T
140-6NO10T	140-115NO10T	10	140-6C10T	140-115C10T
140-6NO15T	140-115NO15T	15	140-6C15T	140-115C15T
140-6NO20T	140-115NO20T	20	140-6C20T	140-115C20T
140-6NO30T	140-115NO30T	30	140-6C30T	140-115C30T
140-6NO45T	140-115NO45T	45	140-6C45T	140-115C45T
140-6NO60T	140-115NO60T	60	140-6C60T	140-115C60T
140-6NO75T	140-115NO75T	75	140-6C75T	140-115C75T
140-6NO90T	140-115NO90T	90	140-6C90T	140-115C90T

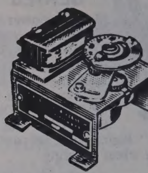
Any of the thermostatic time delay relays shown in the list above, each **Net $2.40**

INDUSTRIAL TIMERS

SINGLE CAM TIMERS



Series RA



Series CM

Provide a single timed interval determined by the speed of a 60 cps synchronous motor and associated gear rack. A single-turn cam actuates a snap-action, SP-DT switch rated to carry 10 amps non-inductive load. Series RA starts time interval when voltage is applied, shuts off at the end of time interval. Series CM time interval is continously repetitive, has a cam adjustable for both ON and OFF percentages of the total time interval. Overall size (HWD): RA 2-13/16" x 4¾ x 3½"; CM 2-7/16 x 3-1/16 x 3".

RECYCLING SERIES CM

Cat. No.	Total Time	Cat. No.	Total Time
317-CM2/C12	15 sec	317-CM9/A12	2 hrs
317-CM2/A12	30 sec	317-CM9/A18	3 hrs
317-CM3/C18	45 sec	317-CM10/A12	6 hrs
317-CM3/A12	60 sec	317-CM11/D36	12 hrs
317-CM6/A18	15 min	317-CM12/A12	24 hrs
317-CM7/A12	30 min	317-CM12/A18	36 hrs
317-CM8/C18	45 min	317-CM12/A24	48 hrs
317-CM8/A12	60 min	317-CM12/A36	72 hrs

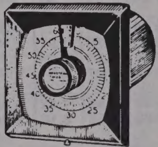
Any of the above CM Timers for 115 v-ac 60 cycles **Each Net $20.50**

SERIES RA

Series RA Timers are available in the same total time ranges as Series CM. When ordering change CM to RA in Catalog Number. **Series RA Timers** for 110 v-ac 60 cps. **Net Each $30.50**

MULTIPLE CAM TIMERS

Series RA and CM Timers are available with multiple cams/switches (up to 20). Prices and delivery supplied on request.

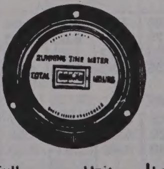


SERIES GTD
TIME DELAY TIMER

Provides a switch transfer (SP-DT) at the end of a pre-selected time interval. Timer is started when voltage is applied, times to pre-set interval, operates the load switch, and remains in this position until voltage is removed. Dials calibrated as listed below. For panel mounting in 3" hole. Panel size 4" x 4-3/8" high. Depth behind panel 4-23/32". SP-DT switch rated 10 amps non-inductive.

Cat. No.	Max. Time	Dial Div.	Cat. No.	Max. Time	Dial Div.
317-GTD-3S	3 sec.	1/20 sec.	317-GTD-5M	5 min.	5 sec.
317-GTD-6S	6 sec.	1/10 sec.	317-GTD-15M	15 min.	15 sec.
317-GTD-15S	15 sec.	1/4 sec.	317-GTD-30M	30 min.	30 sec.
317-GTD-30S	30 sec.	1/2 sec.	317-GTD-60M	60 min.	1 min.
317-GTD-60S	60 sec.	1 sec.	317-GTD-3H	3 hrs.	3 min.
317-GTD-3M	3 min.	3 sec.			

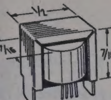
Any GTD Time Delay Timer Above, for 115 v-ac 60 cps **Net $45.00**



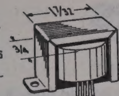
RUNNING TIME METERS

For elapsed time records. Model C2 runs to full reading and starts again from zero. Model C5 has zero reset. Both models use heavy-duty synchronous motors and gears with life-time lubrication. For 115 v-ac 60 cps. only.

Full Range	Unit Count	Less Reset Cat.	Net	With Reset Cat.	Net
10,000 hrs	1/10 hr	317-C2	$20.00	317-C5	$42.50
100,000 hrs	1 hr	317-C2A	20.00	317-C5A	43.50
10,000 min	1/10 min	317-C2D	20.00	317-C5D	43.50
100,000 min	1 min	317-C2F	20.00	317-C5F	43.50



TZ Type

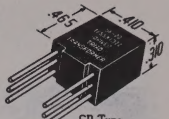


T Type

TRIAD TRANSFORMERS

SUB-MINIATURE & MINIATURE AUDIO TRANSFORMERS

For use with either vacuum tube or transistorized circuitry. Types TZ and T are varnish impregnated to prevent core chatter and moisture absorption. Type SP is encapsulated in molded epoxy. Max. unit wts.: TZ .015 lbs.; T .045 lbs.; SP .10 oz. §Split winding. *Or reverse.



SP Type

SUB-MINAITURE SERIES TZ

at. o.	MW Power	Application	Primary Impedance	Secondary Impedance	Frequency Response	Turns Ratio	Net 1-9	10-24	25-49	50-99	100-249	250-Up
22-TZ-7	1	Mike/VC to transistor	30/12/4	1,000	40-20,000	1:5.73	$4.73	$4.26	$3.83	$3.56	$3.35	$3.18
22-TZ-13	1	Plate to 1 or 2 grids	15K (1ma-dc)	135,000ct.	70-15,000	1:3	6.88	6.19	5.57	5.18	4.87	4.63
22-TZ-15	1	Transistor Interstage	20K (.5ma-dc)	1200/600/100	70-15,000	4.08:1	4.98	4.48	4.03	3.75	3.53	3.35
22-TZ-26	1	Transistor Output	1K (ma-dc)	50	100-10,000	4.5:1	5.02	4.52	4.07	3.79	3.56	3.38

MINIATURE SERIES T

at. o.	MW Power	Application	Primary Impedance	Secondary Impedance	Frequency Response	Turns Ratio	Net 1-9	10-24	25-49	50-99	100-249	250-Up
22-T-1X	1	Line/mike to grid	600/250/50	50,000	60-15,000	1:9.16	$5.87	$5.28	$4.75	$4.42	$4.15	$3.94
22-T-5X	1	Mike/VC to grid	30/12/4	50,000	50-15,000	1:39.7	5.33	4.79	4.31	4.01	3.77	3.58
22-T-12X	10	Plate to 1 or 2 grids	15,000	60,000ct.	60-15,000	1:2	5.68	5.11	4.59	4.27	4.01	3.81
22-T-20X	10	Plate to line	15,000	600/250/50	60-15,000	5:1	4.88	4.39	3.95	3.67	3.45	3.28
22-T-22X	10	Plate to line	15K (3ma-dc)	600/250/50	350-7,500	5:1	4.43	3.99	3.59	3.34	3.14	2.98
22-T-23X	10	1 or 2 plates to line	20,000ct.	600/250/50	60-15,000	5.76:1	5.23	4.71	4.24	3.94	3.70	3.52
22-T-25X	10	Plate to line	12Kct. (2ma-dc)	600ct/150	50-16,000	4.47:1	4.35	3.92	3.53	3.28	3.08	2.93
22-T-31X	10	Line to line	600/250/50	600/250/50	50-15,000	1:1	4.73	4.26	3.83	3.56	3.35	3.18
22-T-33X	10	Isolation, hi-imp.	5,000 ct.	5000 ct.	60-15,000	1:1	5.90	5.31	4.78	4.45	4.18	3.97
22-T-34X	20	Transistor to line*	500 ct. (2ma)	500ct/125	50-20,000	1:1.03	3.43	3.09	2.78	2.59	2.43	2.31
22-T-35X	10	Trans/line to line	600 ct. (1ma)	2000ct/500	50-20,000	1:1.7	4.27	3.84	3.46	3.22	3.03	2.88
22-T-102X		Coupling reactor	6hry. (3ma-dc) or 4hry. (6ma-dc)									

ENCAPSULATED SERIES SP

at. o.	Mil Type	Power MW	Application	Primary Impedance	Secondary Impedance	—Ohms Resistance— Pri.	Sec.	Net 1-9	10-24	25-49	50-99	100-249
22-SP-4	TF5SX16ZZ	10	Input	200,000 ct.	1000 ct.	5300	100	$11.33	$10.19	$9.17	$8.53	$8.02
22-SP-5	TF5SX16ZZ	25	Input	50,000 ct.	1000 ct.	3800	75	10.75	9.68	8.71	8.10	7.61
22-SP-11	TF5SX13ZZ	40	Interstage	25K/20K	1000/800 ct.	1700	115	8.93	8.04	7.24	6.73	6.33
22-SP-13	TF5SX13ZZ	40	Interstage	25Kct/20Kct.	1Kct/800ct.	1700	115	9.80	8.82	7.94	7.38	6.94
22-SP-20	TF5SX13ZZ	50	Driver	10,000 ct.	1200 ct.	1050	200	9.42	8.48	7.63	7.09	6.66
22-SP-21	TF5SX13ZZ	50	Driver	10,000 ct.	2000 ct.	1050	330	9.47	8.52	7.67	7.13	6.70
22-SP-22	TF5SX13ZZ	50	Driver	10,000 ct.	2Kct/500ct.	1050	146/168	9.83	8.85	7.97	7.41	6.97
22-SP-29	TF5SX13ZZ	50	Driver	10,000 ct.	500 ct.	1050	80	9.17	8.25	7.43	6.91	6.49
22-SP-33	TF5SX17ZZ	50	Output	1,000 ct.	50 ct.	145	8	7.67	6.90	6.21	5.78	5.43
22-SP-42	TF5SX17ZZ	50	Output	150 ct.	12 ct.	18	2.7	7.87	7.08	6.37	5.92	5.56
22-SP-49	TF5SX17ZZ	50	Output	300 ct.	600 ct.	41	98	8.08	7.27	6.54	6.08	5.72
22-SP-50	TF5SX17ZZ	50	Output	500 ct.	600 ct.	67	98	8.23	7.41	6.67	6.20	5.83
22-SP-51	TF5SX17ZZ	50	Output	900 ct.	600 ct.	104	96	8.28	7.45	6.71	6.24	5.87
22-SP-52	TF5SX13ZZ	50	Output	1,500 ct.	600 ct.	168	92	8.62	7.76	6.98	6.49	6.10
22-SP-65	TF5SX13ZZ	50	Output	8,000 ct.	3.2	790	.76	8.10	7.29	6.56	6.10	5.73
22-SP-66	TF5SX13ZZ	50	Output/Iso.	10,000 ct.	10,000 ct.	1000	1300	9.17	8.25	7.43	6.91	6.49
22-SP-67	TF5SX17ZZ	50	Output/Iso.	600 ct.	600 ct.	72	92	8.15	7.34	6.61	6.15	5.78
22-SP-68	TF5SX17ZZ	50	Output/Iso.	10,000	10,000ct/2500	1000	565/650	9.62	8.66	7.79	7.24	6.81
22-SP-69	TF5SX17ZZ	50	Output/Iso.	600	600ct/1508	72	40/45	9.18	8.26	7.43	6.91	6.49
22-SP-70	TF5SX17ZZ	50	Output/Iso.	600	600	72	92	7.50	6.75	6.08	5.65	5.31
22-SP-107	TF5SX20ZZ	—	Audio Choke 1.25hry.		. . .	180	. . .	6.47	5.82	5.24	4.87	4.58
22-SP-310	....	—	Magnetic shielding case for SP units.					1.00	.90	.81	.75	.71

TOROIDAL INDUCTORS

High stability with voltage and temperature variations. Powdered nickel alloy cores. Vindings have low distributed capacitance and resistance. Min. ind. 'ol. ± 2%. *For 5% inductance drop.

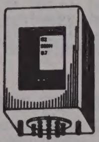
EA SERIES 1.125" DIA. X .5"

at. o.	MH Ind.	Ohms Res.	DC Ma*	Net 1-9	10-24	25-49	50-99	100-249
22-EA-010	10	2.10	86	$3.65	$3.29	$2.96	$2.75	$2.59
22-EA-025	25	4.80	54	3.75	3.38	3.04	2.83	2.66
22-EA-030	30	6.70	50	3.75	3.38	3.04	2.83	2.66
22-EA-100	100	23.00	27	3.90	3.51	3.16	2.94	2.76
22-EA-150	150	37.00	22	4.05	3.65	3.29	3.06	2.88

EC SERIES 1.4375" DIA. X .75"

at. o.	MH Ind.	Ohms Res.	DC Ma*	Net 1-9	10-24	25-49	50-99	100-249
22-EA-030	30	2.85	95	$4.30	$3.87	$3.48	$3.24	$3.05
22-EA-050	50	5.50	74	4.42	3.98	3.58	3.33	3.13
22-EA-070	70	8.30	62	4.47	4.02	3.62	3.37	3.17
22-EC-100	100	13.00	52	4.52	4.07	3.66	3.40	3.19

he EC Series is available from 1 to 10,000 mh, the EA Series from to 1,000 mh. Prices and delivery quoted on request.



LOW FREQUENCY GEOFORMERS

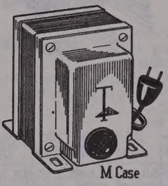
Miniature and subminiature transformers specially designed for the low frequency response required for geophysical applications. They incorporate triple shielding, balanced windings, hermetic sealing, and other features necessary for quiet operation at low signal levels. Many others are available. For a complete listing request a TRIAD Transformer Catalog. It will be mailed free on request.

Cat. No.	Pri. Matching Impedance	Sec. Matching Impedance	Freq. Response	Net Ea.
322-G-4	60-44-30-25 15-7½-5-1.25	157,000 or 39,250	11-5,000	$36.10
322-G-21	200,000 ct.	12,500 ct.		34.22
322-G-31	10,000 or 2,500	100,000 or	5-5,00	27.73
322-G-101	500-333-233-200 125-67½-50-17	25,000	11-3,700	28.32

*Center tapped. §Balanced two windings. §§Balanced parallel windings. †500§-333-233-200§-125§§-67.5§-50§§-17§§. ‡16§-12-8§-6.5-4§§-2§§-1.5§-.35§§. ††60§-45-30§-24-15§§-7.5-5§-1.3§§. ‡‡50§-25-12.5-3.

TRIAD TRANSFORMERS

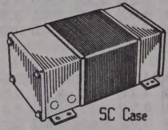
ISOLATION TRANSFORMERS



For use where electrical or electronic equipment, appliances, etc., must be isolated from the power line. N-51X is for 60 Hz, all others for 50/60 Hz operation. Models with "M" suffix have 6 ft. input cord and plug, and output receptacle. Suffix letter (X, M or A) in catalog number indicates case style. § Split winding.

Cat. No.	Output VA	Pri. V.	Secondary V.	Secondary Amps	Max. Lbs.	Case Size H. x W. x D.	Ea. 1-9	10-24	25-49	50-99	100-249
322-N-51X	35	115	115	.300	1.7	2.28" x 3.68" x 2.12"	$5.60	$5.04	$4.54	$4.22	$3.97
322-N-68X	50	115-230§	115	.435	1.7	2.28" x 3.68" x 2.12"	6.15	5.54	4.99	4.64	4.36
322-N-53M	85	115	115	.740	4.7	3.59" x 2.96" x 3.62"	13.65	12.29	11.06	10.29	9.67
322-N-54M	150	115	115	1.300	7.0	3.87" x 3.28" x 4.25"	16.63	14.97	13.47	12.53	11.78
322-N-67A	150	115-230§	115	1.300	7.0	3.87" x 3.28" x 4.12"	14.43	12.99	11.69	10.87	10.22
322-N-55M	250	115	115	2.170	11.0	4.62" x 3.93" x 5.00"	29.23	26.31	23.68	22.02	20.69

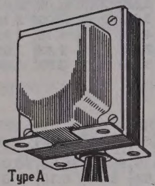
UNIVERSAL ISOLATION/AUTOFORMERS

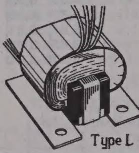


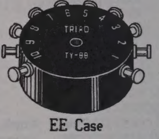
These units have four isolated windings, each for 115 v-ac, 50/60 Hz. They may be connected in series or parallel for various step-up, step-down, isolation, or autoformer applications.

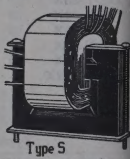
Cat. No.	Output VA Iso.	Output VA Auto	Test V.	Case Size H. x W. x D.	Max. Lbs.	Ea. 1-9	10-24	25-49	50-99	100-249
322-N-64AC	500	1000	1500	5.31" x 4.59" x 5.50"	15	$38.40	$34.56	$31.10	$28.92	$27.18
322-N-62AC	1000	2000	1500	6.50" x 5.50" x 6.62"	29.5	77.57	69.81	62.83	58.43	54.92
322-N-60SC	2000	4000	2500	4.75" x 8.50" x 13.5"	56	142.18	127.96	115.16	107.09	100.66

TRANSISTOR POWER SUPPLY TRANSFORMERS









For use in solid state circuitry to produce either high voltage d-c, or line voltage a-c. Transformers have windings for a transistorized oscillator to generate an a-c energizing voltage, and a secondary winding for solid state rectifiers for d-c voltages, or a secondary winding for a-c voltages. Complete information in Triad Engineering Bulletin on Transistor Power Supply Transformers. *Output for full-wave bridge rectifier. For full-wave center-tap circuitry voltage output is one half of the values given below. †Size, either Dia. x H., or H x W x D. ‡400 Hz, 60 watts. §60 Hz, 115 watts. #60 Hz, 60 watts.

MOLDED TORODIAL EE. DC TO DC

Cat. No.	DC-V Input	DC Output* V.	DC Output* Ma.	Size †	Ea. 1-9	10-24	25-49
322-TY-78	12.6	250	100	E x B	$15.77	$14.19	$12.77
322-TY-79	12.6	300	200	E x C	16.73	15.06	13.55
322-TY-80	12.6	325	150	E x C	16.22	14.59	13.13
322-TY-81	12.6	375	200	G x C	16.17	14.55	13.09
322-TY-82	12.6	450	150	G x C	16.48	14.83	13.35
322-TY-83	12.6	500	250	M x D	23.88	21.49	19.34
322-TY-84	12.6	600	200	M x D	25.13	22.62	20.36
322-TY-85	12.6	600	350	N x F	26.57	23.91	21.52
322-TY-86	12.6	425	350	M x D	25.40	22.86	20.57
322-TY-88	28.0	250	80	D x A	14.98	13.48	12.13
322-TY-89	28.0	300	100	E x B	14.98	13.48	12.13
322-TY-90	28.0	325	200	E x C	17.55	15.79	14.21
322-TY-91	28.0	375	200	G x C	17.55	15.79	14.21
322-TY-92	28.0	450	200	G x C	17.82	16.04	14.44
322-TY-93	28.0	500	250	M x D	26.75	24.08	21.67
322-TY-94	28.0	600	200	M x D	24.05	21.65	19.49
322-TY-99	6.0	300	100	E x C	15.67	14.10	12.69
322-TY-100	6.0	325	150	G x C	25.87	23.28	20.95
322-TY-101	6.0	375	200	M x D	20.93	18.84	16.96
322-TY-102	6.0	450	150	M x D	21.33	19.19	17.27

NOTE. Larger quantity prices available on request.

OPEN TYPE S. DC TO DC

Cat. No.	DC-V Input	DC Output* V.	DC Output* Ma.	Size †	Ea. 1-9	10-24	25-49
322-TY-68S	12.0	250	65	F x H x G	$7.13	$6.42	$5.78
322-TY-69S	12.0	300	100	F x I x F	10.28	9.25	8.33
322-TY-70S	12.0	325	150	G x I x J	9.22	8.29	7.46
322-TY-71S	12.0	375	200	G x I x J	9.22	8.29	7.46
322-TY-74S	12.0	600	200	G x T x O	13.97	12.57	11.31

INVERTER TYPE. DC TO AC

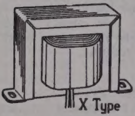
Cat. No.	DC-V Input	Secondary AC-V	Size †	Ea. 1-9	10-24	25-49
322-TY-468	28.0	110-115-125‡	FxHxG	$13.72	$12.35	$11.12
322-TY-462	12.6	110-115-125‡	FxHxG	18.83	16.95	15.26
322-TY-75A	12.6	110-115-125§	SxQxR	20.27	18.24	16.42
322-TY-76A	12.6	110-115-125#	PxLxK	12.63	11.37	10.23

TY-468 & TY-462 Type L. TY-75A & TY-76A Type A.

SIZE REFERENCE

A	.562"	E	1.750"	K	2.625"	Q	3.281"
B	.687"	F	1.875"	L	2.656"	R	3.500"
C	1.000"	G	2.000"	M	2.750"	S	3.875"
D	1.312"	H	2.250"	N	2.875"	T	4.125"
E	1.343"	I	2.375"	O	3.000"	....	
F	1.375"	J	2.437"	P	3.187"	....	

COMBINED PLATE & FILAMENT TRANSFORMERS

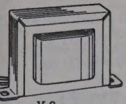


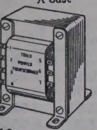
Featuring UL approved lead materials, varnish impregnation to insure the greatest protection against moisture and prevent lamination chatter, copper foil shielding and low temperature rise. Only a few are listed below, but

Cat. No.	Secondary AC-V ±5%	D-C Ma. Cond.*	D-C Ma. Choke*	Rectifier Fil.	Other Fil.	Size H. x W. x D.	Max. Lbs.	Ea. 1-9	10-24	25 4
322-R-4A	250-0-250	40	51.0	....	6.3 v-ct @ 2.0 a.	2.78" x 2.34" x 2.62"	1.8	$8.28	$7.45	$6.7
322-R-6A	240-0-240	50	63.5	....	6.3 v-ct @ 2.0 a.	3.18" x 2.65" x 2.62"	2.8	10.12	9.11	8.1
322-R-7A	300-0-300	50	63.5	5 v. @ 2 a.	6.3 v-ct @ 2.0 a.	3.18" x 2.65" x 2.62"	2.8	9.85	8.87	7.9
322-R-22A	190-160-0-160-190	70	89.0	....	6.3 v-ct @ 0.6 a.	3.18" x 2.65" x 2.62"	2.8	10.27	9.24	8.3
322-R-11A	350-0-350	90	115.0	5 v. @ 3 a.	6.3 v-ct @ 3.5 a.	3.50" x 2.96" x 3.25"	4.3	13.50	12.15	10.9
322-R-12A	275-0-275	110	140.0	5 v. @ 2 a.	6.3 v-ct @ 5.0 a.	3.87" x 3.28" x 3.37"	4.5	13.42	12.08	10.8
322-R-16A	350-0-350	160	200.0	5 v. @ 3 a.	6.3 v-ct @ 5.0 a.	3.87" x 3.28" x 4.37"	7.0	17.38	15.64	14.0
322-R-18A	375-0-375	175	220.0	5 v. @ 3 a.	6.3 v-ct @ 8.0 a.	4.25" x 3.59" x 4.37"	8.5	17.42	15.68	14.1
322-R-3A†	250-0-250	20	25.5	....	6.3 v-ct @ 2.0 a.	2.78" x 2.34" x 2.50"	1.8	8.30	7.47	6.7
322-R-30X†	135	50	64.0	....	6.3 v @ 1.5 a.	2.28" x 3.75" x 2.12"	1.5	6.90	6.21	5.5
322-R-54X†	115	15	19.0	....	6.3 v @ 0.6 a.	1.62" x 2.81" x 1.62"	1.0	4.35	3.92	3.5

*Condenser or choke input filter. †For preamplifiers, VTVM's, etc. All primaries for 115 v-ac, 50/60 Hz.

TRIAD TRANSFORMERS


X Case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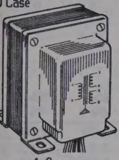

A Case

FILAMENT TRANSFORMERS

†Primary for 115 v-ac, 50/60 Hz, others for 115 v-ac, 60 Hz. *Primary tapped for different secondary voltages. ‡Indicates center-tapped secondary winding. Catalog suffix letter (X, U or A) indicates case style shown at left.

Cat. No.	---Secondary---------- Volts	Amps	RMS Test V. Pri.	Sec.	-------- Case Size---- H. W. D.	Max. Lbs.	Ea. 1-9	10-24	25-49	50-99	100-249
322-F-1X	2.5‡	3.0	1500	1500	1.62" x 2.81" x 1.62"	.68	$3.73	$3.36	$3.02	$2.81	$2.64
322-F-3X	2.5‡	10.0	1500	3000	2.28" x 3.75" x 2.12"	1.70	6.12	5.51	4.96	4.61	4.33
322-F-7X†	5.0‡	3.0	1500	1500	1.93" x 3.31" x 2.00"	1.30	4.42	3.98	3.58	3.33	3.13
322-F-13X†	6.3	0.6	1500	1500	1.37" x 2.37" x 1.37"	.37	3.33	2.99	2.69	2.50	2.35
322-F-14X	6.3‡	1.2	1500	2500	1.62" x 2.81" x 1.62"	.70	3.63	3.27	2.94	2.73	2.57
322-F-43X	6.3	4.0	1500	1500	1.93" x 3.31" x 2.00"	1.25	4.97	4.47	4.02	3.74	3.52
322-F-16X†	6.3‡	3.0	1500	2500	1.93" x 3.31" x 2.00"	1.30	4.78	4.30	3.87	3.59	3.37
322-F-18A†	6.3‡	6.0	1500	1500	3.18" x 2.65" x 2.62"	2.50	8.40	7.56	6.80	6.32	5.94
322-F-18X†	6.3‡	6.0	1500	1500	2.59" x 4.00" x 2.25"	2.30	7.13	6.42	5.78	5.38	5.06
322-F-21A†	6.3‡	10.0	1500	1500	3.59" x 2.96" x 3.12"	3.80	11.55	10.39	9.35	8.69	8.17
322-F-22A†	6.3‡	20.0	2000	2000	3.87" x 3.28" x 4.12"	7.00	15.83	14.25	12.83	11.93	11.21
322-F-24U†*	7.5‡/6.3‡	8.0	1500	3000	3.50" x 2.87" x 2.81"	3.65	10.22	9.19	8.27	7.69	7.23
322-F-29U†*	12‡/11‡/10‡	11.0	1500	3000	4.37" x 3.50" x 3.37"	6.50	16.35	14.72	13.25	12.32	11.58
322-F-25X†	12.6‡	1.5	1500	1500	1.93" x 3.31" x 2.00"	1.30	4.47	4.02	3.62	3.37	3.17
322-F-44X	12.6‡	2.0	1500	1500	1.93" x 3.31" x 2.00"	1.25	4.35	3.92	3.53	3.28	3.08
322-F-26X	12.6‡	2.5	1500	1500	2.28" x 3.68" x 2.00"	1.55	5.00	4.50	4.05	3.77	3.54
322-F-40X	26.8‡	1.0	1500	1500	1.93" x 3.31" x 2.00"	1.30	4.47	4.02	3.62	3.37	3.17
322-F-41X	25.2‡	2.0	1500	1500	2.59" x 4.00" x 2.25"	2.20	6.00	5.40	4.86	4.52	4.25
322-F-45X	24.0‡	1.0	1500	1500	1.93" x 3.31" x 2.00"	1.30	4.50	4.05	3.65	3.39	3.19

POWER TRANSFORMERS
FOR SOLID STATE RECTIFIERS

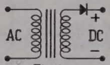


Fig.A

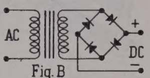


Fig.B

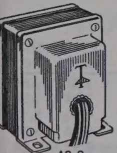
or use in solid state rectifier d-c power supplies. D-c voltages shown are for circuits Fig. A d B. Higher voltages may be obtained through the use of capacitor input filters; in that case, owever, rated d-c current must be reduced by approximately 2. If a voltage doubler circuit is used current must be reduced by approx-nately 4. †Primary for 50/60 Hz, others for 60 Hz. *Tapped primary produces lower voltages. #Split winding. §Separate windings, a-c np rating and d-c voltage ratings same for each winding. ‡Center tapped winding. Catalog suffix letter (U or AC) indicates case style.

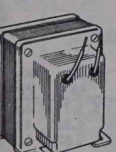
t. o.	Pri. AC-V	-------- Secondary AC----------- Volts	Amps	-----DC Volts------ 1/2 Wave	Bridge	---- Case Size------ H.	W.	D.	Max. Lbs.	Ea. 1-9	10-24	25-49	50-99	100-249
22-F-47U	115†	0-17-18	3.0	6-7	13-14	3.12"	2.56"	3.00"	3.2	$9.13	$8.22	$7.39	$6.87	$6.46
22-F-48U	115†	0-17-18	6.0	6-7	13-14	3.81"	3.18"	3.18"	5.5	13.10	11.79	10.61	9.87	9.28
22-F-49U	115†	36§-36§	3.0	13	26	4.62"	3.81"	3.75"	9.8	21.73	19.56	17.60	16.37	15.39
22-F-60U	115†	0-6.5-13-19.5-26	3.0	9	18	4.50"	2.87"	2.68"	3.5	8.98	8.08	7.27	6.76	6.35
22-F-61U	115†	0-24-27-30-33-36	3.0	13	26	3.81"	3.18"	3.25"	5.7	13.67	12.30	11.07	10.29	9.67
22-F-67U	110-120	0-24-27-30-33-36	8.0	13	26	4.62"	3.81"	4.37"	10.8	27.15	24.44	21.99	20.45	19.22
22-F-64U	115†	0-7-8-9	7.0	. .	5-6-7	3.50"	2.87"	2.75"	3.5	10.28	9.25	8.33	7.75	7.29
22-F-62U	105-115-125	9§-9§-9§-9§	10.0	. .	7	4.62"	3.81"	5.25"	16.0	37.53	33.78	30.40	28.27	26.57
22-F-79U	115	0-24-26-28-30	15.0	11.4	22.8	3.81"	4.62"	5.50"	18.5	39.33	35.39	31.85	29.62	27.84
22-F-80U	115*	0-12-13.5-15-16.5-18	20.0	. . .	13	5.37"	4.43"	5.50"	25.0	66.43	59.79	53.81	50.04	47.04
		0-12-13.5-16-16.5-18	20.0	. . .	13									
22-F-84AC	115 or 230#	12§‡-12§‡	10.0	. . .	8.5	4.62"	3.93"	5.12"	12.7	30.70	27.63	24.87	23.13	21.74

LOW VOLTAGE, LOW CURRENT, FOR TRANSISTOR DRIVE

22-F-94X	115*	10-20‡, 40‡	0.035	15	30	1.37"	2.37"	1.37"	0.5	$4.37	$3.93	$3.54	$3.29	$3.09
22-F-90X	115*	10-20‡, 40‡	0.100	15	30	1.62"	2.81"	1.62"	0.7	4.42	3.98	3.58	3.33	3.13
22-F-91X	115*	10-20‡, 40‡	0.300	15	30	2.28"	3.68"	2.00"	1.5	5.45	4.91	4.42	4.11	3.86
22-F-93X	115*	10-20‡, 40‡	0.750	15	30	2.59"	4.00"	2.25"	2.4	7.07	6.36	5.72	5.32	5.00
22-F-92A	115*	10-20‡, 40‡	1.000	15	30	3.18"	2.65"	3.00"	3.3	9.18	8.26	7.43	6.91	6.49

FILTER REACTORS


AC Case

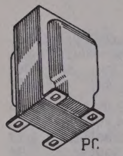

AL Case

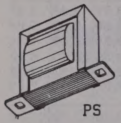
Cat. No.	MA-DC	Hry. Ind.	Ohms Res.	Test V.	--- Case Size------ H.	W.	D.	Max. Lbs.	Ea. 1-9	10-24	25-49	50-99	100-249
322-C-2X	15	2	70	1500	1.18"	2.06"	1.25"	.21	$2.32	$2.09	$1.88	$1.75	$1.65
322-C-30X	15	50	3500	1500	1.37"	2.37"	1.50"	.42	3.35	3.02	2.72	2.53	2.38
322-C-1X	20	15	1000	1000	1.18"	2.06"	1.25"	.21	2.62	2.36	2.12	1.97	1.85
322-C-3X	50	10	500	1500	1.62"	2.81"	1.50"	.60	3.08	2.77	2.49	2.32	2.18
322-C-4X	50	4	360	1500	1.37"	2.37"	1.37"	.35	2.63	2.37	2.13	1.98	1.86
322-C-5X	75	12	390	1000	1.93"	3.31"	1.75"	1.00	3.77	3.39	3.05	2.84	2.67
322-C-7X	90	10	270	1000	1.93"	3.31"	2.00"	1.30	4.07	3.66	3.29	3.06	2.88
322-C-9X	90	4	100	1500	1.93"	3.31"	1.75"	1.00	3.60	3.24	2.92	2.72	2.56
322-C-11X	110	6	160	1500	2.28"	3.68"	2.00"	1.50	4.97	4.47	4.02	3.74	3.52
322-C-10X	125	9	250	1000	2.28"	3.68"	2.00"	1.60	4.92	4.43	3.99	3.71	3.49
322-C-12X	160	6	165	1500	2.28"	3.68"	2.12"	1.75	5.10	4.59	4.13	3.84	3.61
322-C-14X	200	6	150	1500	2.59"	4.00"	2.25"	2.30	5.82	5.24	4.72	4.39	4.13
322-C-16A	200	10	150	2500	3.50"	2.96"	3.50"	4.50	10.52	9.47	8.52	7.92	7.44
322-C-15X	250	4	100	1500	2.59"	4.00"	2.25"	2.30	5.65	5.09	4.58	4.26	4.00
322-C-27X	290	.7	30	1500	1.62"	2.81"	1.50"	.75	2.67	2.40	2.16	2.01	1.89
322-C-36X	300	.5	30	1500	1.37"	2.37"	1.50"	.50	2.62	2.36	2.12	1.97	1.85
322-C-17X	300	1.5	40	1500	2.28"	3.68"	2.00"	1.60	4.30	3.87	3.48	3.24	3.05
322-C-20A	400	6	60	3000	4.62"	3.93"	4.50"	10.50	18.80	16.92	15.23	14.16	13.31
322-C-45AL	500	10	65	5000	5.31"	4.50"	5.12"	17.75	33.82	30.44	27.39	25.47	23.94
322-C-40X	600	.32	10	1500	1.93"	3.31"	2.00"	1.30	3.65	3.29	2.96	2.75	2.59
322-C-47U	1A/2A	.3/.075§	3/.75	1500	3.50"	2.87"	3.18"	4.60	10.10	9.09	8.18	7.61	7.15
322-C-48U	2.5A/5A	.035	.75	1500	2.25"	2.62"	2.00"	2.00	12.98	11.68	10.51	9.77	9.18
322-C-49U	5A/10A	.032/.008§	.61/.155	1500	3.81"	3.18"	3.56"	6.75	19.82	17.84	16.06	14.94	14.04

§Split winding. Inductance tolerance -20% +50%.

STANCOR TRANSFORMERS

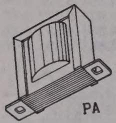
For service, replacement, new construction, or experimental uses. STANCOR has replacement power transformers, filament transformers, etc., for most radio and TV receivers, amplifiers, etc. If you need a replacement unit send us the manufacturer's name, nuit model number, and the tubes used. We'll quote price and delivery. #Center tapped winding. †Dual 6.3 volt 3 amp. winding. ‡For half-wave rectifier. Primaries 117 v-ac 60 Hz.


PC


PS

POWER TRANSFORMER (PLATE & FILAMENT TYPE)

Cat. No.	See Fig.	Secondary Volts (RMS)	D.C. Ma.	Fil. 5V.@	Fil. 6.3V.@	------Size------ H W D	Lbs. Wt.	Ea. 1-9	10-24	25-49	50-99
PS-8415	PS	125 —	15	—	0.6A.	1.93"x2.37"x1.62"	0.7	$ 3.67	$ 3.30	$ 2.97	$ 2.75
PS-8416	PS	125-0-125	25	—	1.0A.	2.31"x2.81"x1.75"	1.0	4.33	3.90	3.51	3.25
PA-8421	PA	125 —	50	—	2.0A.	2.25"x3.68"x2.12"	1.5	5.17	4.65	4.19	3.88
P-8181	PS	150 —	25	—	0.5A.	1.93"x2.37"x1.81"	0.8	4.83	4.35	3.91	3.62
PC-8402	PC	240-0-240	55	2.0A.	2.0A.	3.12"x2.50"x2.75"	2.4	8.67	7.80	7.02	6.50
PC-8405	PC	270-0-270	120	3.0A.	3.5A.	3.87"x3.12"x3.50"	4.9	11.59	10.43	9.39	8.69
PC-8412	PC	400-0-400	200	3.0A.	5.0A.	4.68"x3.75"x4.00"	8.2	17.50	15.75	14.18	13.13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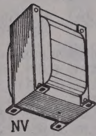
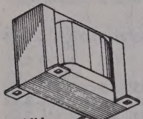

NV

FILAMENT TRANSFORMERS

Cat. No.	See Fig.	Secondary Volts	Amps.	Ins. V-RMS	----Size---- H W D	Lbs. Wt.	Ea. 1-9	10-24	25-49	50-99
P-8629	PA	2.5—	1.0	1500	1.37"x2.37"x1.37"	0.4	$ 2.58	$2.32	$2.09	$1.94
P-6467	PA	5.0ct	3.0	2500	2.00"x3.25"x2.12"	1.4	4.17	3.75	3.38	3.13
P-8385	PA	6.3ct	0.3	1500	1.25"x2.12"x1.37"	0.3	3.17	2.85	2.57	2.38
P-6465	PA	6.3ct	0.6	1500	1.37"x2.37"x1.50"	0.4	3.08	2.77	2.49	2.31
P-8389	PA	6.3—	1.0	1500	1.62"x2.87"x1.50"	0.6	3.00	2.70	2.43	2.25
P-6134	PA	6.3ct	1.2	3000	1.62"x2.87"x1.87"	0.8	3.00	2.70	2.43	2.25
P-8190	PA	6.3—	1.2	5000	2.00"x3.25"x1.87"	1.0	4.33	3.90	3.51	3.25
P-6466	PA	6.3ct	3.0	2500	2.00"x3.25"x2.12"	1.4	4.33	3.90	3.51	3.25
P-6456	PA	6.3ct	6.0	2000	2.37"x3.75"x2.37"	2.0	6.67	6.00	5.40	5.00
P-6308	NV	6.3ct	10.0	2500	3.43"x2.81"x2.62"	3.4	10.84	9.76	8.78	8.13
P-6458	NV	10.0ct	5.0	2000	3.06"x2.50"x2.50"	3.0	8.34	7.51	6.76	6.26
P-8384	PA	12.6ct	1.0	1500	2.00"x3.25"x1.75"	0.9	3.92	3.53	3.18	2.94
P-8130	PA	12.6ct	2.0	1500	2.00"x3.25"x2.12"	1.4	4.17	3.75	3.38	3.13
P-8358	PA	12.6ct	3.0	1500	2.37"x3.75"x2.25"	1.6	4.67	4.20	3.78	3.50
P-6469	PA	25.2—	1.0	1500	2.00"x3.25"x2.12"	1.4	3.92	3.53	3.18	2.94
P-8180	PA	25.2ct	1.0	1500	2.00"x3.25"x2.12"	1.4	3.75	3.38	3.04	2.81
P-8357	PA	25.2ct	2.0	1500	2.62"x4.00"x2.25"	2.2	5.83	5.25	4.72	4.37
P-8388	PA	25.2ct	2.8	1500	2.62"x4.00"x2.25"	2.2	7.50	6.75	6.08	5.63
P-8609	PA	26.8ct	1.0	1500	2.00"x3.25"x2.12"	1.3	3.83	3.45	3.10	2.87
P-8605	PA	48.0ct	1.0	2500	2.62"x4.00"x2.37"	2.3	7.83	7.05	6.34	5.87


NH

FILTER CHOKES

Cat. No.	See Fig.	Hys. Ind.	D.C. Ma.	Ohms Res.	Ins. V-RMS	----Size---- H W D	Lbs. Wt.	Ea. 1-9	10-24	25-49	50-99
C-2344	PA	1.5	10	85	2500	1.25"x2.12"x1.12"	0.4	$2.25	$2.03	$1.82	$1.69
C-2707	PA	2.0	15	70	1500	1.25"x2.12"x1.12"	0.4	2.17	1.95	1.76	1.63
C-1515	PA	20.0	15	900	1500	1.62"x2.87"x1.37"	.07	3.42	3.08	2.77	2.57
C-2318	PA	12.0	30	400	2000	1.37"x2.37"x1.37"	0.5	2.50	2.25	2.03	1.88
C-1706	PA	4.5	50	300	1500	1.37"x2.37"x1.25"	0.5	2.33	2.10	1.89	1.75
C-1707	PA	7.0	50	550	1500	1.37"x2.37"x1.25"	0.5	3.08	2.77	2.49	2.31
C-1003	PA	16.0	50	580	1500	2.00"x3.25"x1.62"	1.0	3.58	3.22	2.90	2.69
C-1709	PA	8.0	85	250	1500	2.00"x3.25"x1.87"	1.4	3.17	2.85	2.57	2.38
C-1001	PA	10.5	110	225	3000	2.62"x4.00"x2.12"	2.3	4.83	4.35	3.91	3.62
C-2303	PA	2.5	130	100	2000	2.00"x3.25"x1.62"	1.0	3.75	3.38	3.04	2.81
C-2304	PA	2.3	150	60	1500	2.00"x3.25"x1.75"	1.0	4.08	3.67	3.30	3.06
C-2327	PA	1.5	200	85	1500	1.62"x2.87"x1.50"	0.7	2.92	2.63	2.37	2.19
C-2347	PA	1.0	350	40	1500	2.00"x3.25"x1.75"	1.0	3.58	3.22	2.90	2.69

HIGH CURRENT FILTER CHOKES

Cat. No.	See Fig.	Mhys. Ind.	D.C. Amps.	Ohms Res.	Ins. V-RMS	----Size---- H W D	Lbs. Wt.	Ea. 1-9	10-24	25-49	50-99
TC-1	A2	3.0	1.0	0.25	1000	1.18"x1.50"x1.12"	0.6	$ 2.00	$ 1.80	$ 1.62	$1.50
TC-2	A2	11.0	1.0	0.75	1000	1.18"x1.50"x1.12"	0.6	2.08	1.87	1.68	1.56
C-2685	NH	35.0	2.0	0.75	1500	2.31"x2.62"x2.12"	1.9	5.50	4.95	4.46	4.13
C-2686	NH	25.0	4.0	0.43	1500	2.87"x3.37"x2.62"	3.4	7.83	7.05	6.34	5.87
C-2687	NH	10.0	8.0	0.15	1500	3.18"x3.75"x3.00"	5.3	10.50	9.45	8.51	7.88
C-2688	NH	10.0	12.5	0.11	1500	3.50"x4.12"x2.87"	5.9	12.50	11.25	10.13	9.38

INDUSTRIAL CONTROL/RECTIFIER TRANSFORMER

Cat. No.	See Fig.	Primary Volts 50-60 Hz	Secondary No. 1	Secondary No. 2	----Size---- H W D	Lbs. Wt.	Ea. 1-9	10-24	25-49	50-99
P-6375	PS	115/230	6V/1A	6V/1A	2.37"x2.87"x1.62"	1.0	$ 4.58	$ 4.12	$ 3.71	$ 3.44
P-6376	PS	115/230	6V/2A	6V/2A	2.75"x3.12"x1.87"	1.5	5.33	4.80	4.32	4.00
P-6377	PS	115/230	12V/2A	12V/2A	3.12"x3.62"x2.25"	2.5	6.83	6.15	5.53	5.12
P-6378	NV	115/230	12V/4A	12V/4A	3.43"x2.81"x2.87"	4.2	12.09	10.88	9.79	9.07
P-6379	NV	115/230	12V/8A	12V/8A	4.18"x3.43"x3.37"	8.0	20.84	18.76	16.88	15.63
P-8615	PS	115/230	24V/.25A	24V/.25A	2.37"x2.87"x1.62"	1.0	5.17	4.65	4.19	3.88
P-8616	PS	115/230	24V/.5A	24V/.5A	2.75"x3.12"x1.87"	1.5	6.00	5.40	4.86	4.50
P-8617	PS	115/230	24V/1A	24V/1A	3.12"x3.62"x2.24"	2.5	7.08	6.37	5.73	5.31

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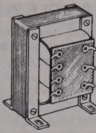
FOR SOLID STATE RECTIFIERS
PRIMARY 117 V-AC, 50/60 HZ



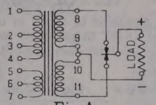


Fig.A

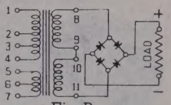


Fig.B

lder lug terminals are marked as shown in the schematic diagrams the right. Terminals 1 thru 4 are the 117 v-ac primary. Terminals hru 7 are for an additional primary winding which is used in series h the 117 volt primary for buck or boost circuitry to control out- t voltages within the limits specified under the heading "Secondary V-AC". Under the heading "D-C Output, Cap. Load" (1) = 1000 d. filter cond., (2) = 5000, (3) = 2000, (4) = 4000, (5) = 6000, (6) = 3000, (7) = 7500, (8) = 12000, (9) = 1500, (10) = 600, (11) = 2500. mplete circuit and wiring information given with each transformer.

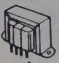
t. .	Rectifier Circuit	Secondary V-AC	Output DC-V Res/Load	Output DC-V Cap/Load	O'All Size H.	W.	D.	Ea. 1-9	10-24	25-49	50-99
RT-201	C-T, Fig. A Bridge, Fig. B	11.7 to 29.4 11.7 to 28.5	11.2 @ 2.00 a. 23.0 @ 1.25 a.	13.8[1] @ 2.00 a. 30.0[2] @ 1.25 a.	3.125	2.500	2.375	$8.17	$7.35	$6.62	$6.13
RT-202	C-T, Fig. A Bridge, Fig. B	12.0 to 29.8 12.0 to 29.8	11.1 @ 4.00 a. 24.3 @ 2.00 a.	14.7[2] @ 4.00 a. 33.0[1] @ 2.00 a.	3.437	2.812	2.750	10.42	9.38	8.44	7.82
RT-204	C-T, Fig. A Bridge, Fig. B	11.7 to 29.2 11.6 to 29.2	12.8 @ 8.00 a. 24.0 @ 4.00 a.	14.5[4] @ 8.00 a. 32.4[3] @ 4.00 a.	3.812	3.125	3.500	15.00	13.50	12.15	11.25
RT-206	C-T, Fig. A Bridge, Fig. B	12.0 to 29.7 12.0 to 29.7	11.5 @ 12.0 a. 24.0 @ 6.0 a.	14.4[5] @ 12.0 a. 32.0[6] @ 6.0 a.	4.187	3.437	4.000	20.34	18.31	16.48	15.26
RT-2012	C-T, Fig. A Bridge, Fig. B	12.2 to 29.0 12.2 to 29.0	11.4 @ 22.5 a. 12.0 @ 12.0 a.	14.3[8] @ 22.5 a. 33.0[5] @ 12.0 a.	5.312	4.375	5.875	41.34	37.21	33.49	31.01
RT-402	C-T, Fig. A Bridge, Fig. B	23.0 to 58.0 23.0 to 58.0	25.0 @ 4.0 a. 51.5 @ 2.0 a.	33.5[6] @ 4.0 a. 72.5[9] @ 2.0 a.	3.812	3.125	4.500	16.34	14.71	13.24	12.26

MINIATURE CONTROL/RECTIFIER TRANSFORMERS

.	See Fig.	Pri. Volts 50-60 Hz	Secondary Volts	Amps.	----Size---- H W D	Lbs. Wt.	Ea. 1-9	10-24	25-49	50-99
390	PA	117	12—	.150	1.25"x2.12"x1.25"	0.25	$3.17	$2.85	$2.57	$2.38
391	PA	117	12—	.350	1.37"x2.37"x1.37"	0.35	3.25	2.93	2.63	2.44
392	PA	117	12—	.700	1.62"x2.87"x1.50"	0.60	3.33	3.00	2.70	2.50
393	PA	117	12—	1.200	2.00"x3.25"x1.62"	0.85	4.00	3.60	3.24	3.00
394	PA	117	24ct	.085	1.25"x2.12"x1.25"	0.25	3.67	3.30	2.97	2.75
395	PA	117	24ct	.200	1.37"x2.37"x1.37"	0.35	3.67	3.30	2.97	2.75
396	PA	117	24ct	.400	1.62"x2.87"x1.50"	0.60	3.67	3.30	2.97	2.75
397	PA	117	24ct	.700	2.00"x3.25"x1.62"	0.85	4.17	3.75	3.38	3.13
720	PA	230	24ct	.085	1.25"x2.12"x1.25"	0.25	3.33	3.00	2.70	2.50
721	PA	230	24ct	.200	1.37"x2.37"x1.37"	0.35	3.17	2.85	2.57	2.38
722	PA	230	24ct	.400	1.62"x2.87"x1.50"	0.60	4.08	3.67	3.30	3.06
723	PA	230	24ct	.700	2.00"x3.25"x1.62"	0.85	4.50	4.05	3.65	3.38
600	PA	117	28ct	.085	1.25"x2.12"x1.25"	0.25	3.17	2.85	2.57	2.38
601	PA	117	28ct	.175	1.37"x2.37"x1.37"	0.35	3.50	3.15	2.84	2.63
602	PA	117	28ct	.300	1.62"x2.87"x1.50"	0.60	3.67	3.30	2.97	2.75
603	PA	117	28ct	.800	2.00"x3.25"x2.00"	1.00	4.17	3.75	3.38	3.13
610	PA	117	36ct	.065	1.25"x2.12"x1.25"	0.25	3.25	2.93	2.63	2.44
611	PA	117	36ct	.135	1.37"x2.37"x1.37"	0.35	3.08	2.77	2.49	2.31
612	PA	117	36ct	.300	1.62"x2.87"x1.50"	0.60	3.50	3.15	2.84	2.63
613	PA	117	36ct	.550	2.00"x3.25"x1.62"	1.00	4.25	3.83	3.44	3.19
728	PA	230	36ct	.065	1.25"x2.12"x1.25"	0.25	3.25	2.93	2.63	2.44
361	PS	117	12*	.100	1.75"x2.00"x1.50"	0.36	4.67	4.20	3.78	3.50
362	PS	117	12*	.150	2.00"x2.37"x1.75"	0.60	3.83	3.45	3.10	2.87
363	PS	117	12*	.250	2.37"x2.87"x1.75"	0.85	5.00	4.50	4.05	3.75
364	PS	117	12*	.500	2.37"x2.87"x2.12"	1.25	5.50	4.95	4.46	4.13

ree isolated 12 Volt Secondaries (one with a center tap), each delivering current shown.

TRANSISTOR AUDIOS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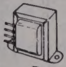
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t. .	See Fig.	Ohms Pri.	Imped. Sec.	Audio Watts	Ea. 1-9	10-24	25-49	50-99
-2	A	100ct	10ct	.25	$2.75	$2.48	$2.23	$2.06
-3	A	100—	1Kct	.25	2.92	2.63	2.37	2.19
-5	A	1K—	200ct	.05	5.17	4.65	4.19	3.88
-7	A	100—	100ct	.50	3.50	3.15	2.84	2.63
-12	A	20ct	8	10.00	3.50	3.15	2.84	2.63
-21	A1	500ct	4,8,16	.15	5.00	4.50	4.05	3.75
-22	A1	500ct	50	.15	4.33	3.90	3.51	3.25
-24	A1	500ct	50K	.15	4.58	4.12	3.71	3.44
-27	A1	1200	20Kct	.15	5.42	4.88	4.39	4.07
-28	A1	1500	500ct	.15	5.33	4.80	4.32	4.00
-30	A1	5Kct	7.5Kct	.15	5.17	4.65	4.19	3.88
-31	A1	5Kct	10Kct	.15	5.00	4.50	4.05	3.75
-33	A1	10Kct	4,8,16	.15	4.17	3.75	3.38	3.13
-35	A1	10K—	2Kct	.15	4.58	4.12	3.71	3.44

TRANSISTOR AUDIOS

Cat. No.	See Fig.	Ohms Pri.	Imped. Sec.	Audio Watts	Ea. 1-9	10-24	25-49	50-99
TA-36	A1	10K—	3Kct	.15	4.83	4.35	3.91	3.62
TA-38	A1	500ct	150ct	.15	4.58	4.12	3.71	3.44
TA-39	A	100ct	4,8,16	.30	4.50	4.05	3.65	3.38
TA-42	A	500ct	4,8,16	.30	4.83	4.35	3.91	3.62
TA-47	A	1Kct	200Kct	.30	5.33	4.80	4.32	4.00
TA-52	A	500ct	500ct	.30	5.17	4.65	4.19	3.88
TA-54	A1	20K—	800ct	.15	4.33	3.90	3.51	3.25
TA-56	S	48ct	3.2,8,16	10.00	4.33	3.90	3.51	3.25
TA-59	A	500ct	200ct	.50	3.83	3.45	3.10	2.87
TA-63	A	20Kct	2Kct	.30	5.75	5.18	4.66	4.31

TRANSISTOR POWER TRANSF.

Cat. No.	See Fig.	Secondary Volts	RMS	D.C. Ma.*	Lbs. Wt.	Ea. 1-9	10-24	25-49	50-99
TP-2	PA	10/20# /40#		100	0.7	$4.33	$3.90	$3.51	$3.25
TP-3	PA	10/20# /40#		300	1.5	5.33	4.80	4.32	4.00
TP-4	PC	10/20# /40#		1000	3.2	9.09	8.18	7.36	6.82

STACO VARIABLE TRANSFORMERS

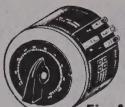


Fig. A

120 VOLT INPUT SINGLE PHASE PANEL MOUNTING

Available in cased or uncased units designed for mounting on panels 1/4" to 5/8" thick. Most units can also be bench mounted. Suffix CT indicates units with enclosed coils and terminals.

Cat.		Output			Size; Inches			Wt.	Net
460-★	Fig.	Volts	Amps	kVA	H x	W x	D	Lbs.	Each
171	A	0-120/132*	1.75	.23	2.812	2.062	2.062	3.0	$12.00
201	A	0-120/132*	2.0	.26	2.812	2.062	2.062	3.0	12.25
251	A	0-120/132*	2.5	.33	2.812	2.437	2.437	3.5	13.00
291	A	0-120/132*	3.0	.40	2.812	2.437	2.437	3.5	13.25
371	B	0-120/140*	3.75	.53	3.750	3.750	3.250	5.0	18.00
501	B	0-120/140	5.0	.70	3.750	3.750	3.312	6.0	19.00
1010	B	0-120/140	10	1.4	5.312	5.000	4.187	12	25.00
1010CT	C	0-120/140	10	1.4	6.875	5.000	4.437	12	33.00
1210	B	0-120†	12	1.4	5.312	5.000	4.187	12	27.00
1210CT	C	0-120†	12	1.4	6.875	5.000	4.437	12	35.00
1510	D	0-120/140	15	2.1	6.125	6.625	4.375	20	48.00
2510	D	0-120/140	25	3.5	8.187	7.625	4.125	23	67.00
2510CT	E	0-120/140	25	3.5	9.625	7.625	4.125	23	80.00
5010	D	0-140	50	7.0	12.50	12.50	6.500	60	162.00
5010CT	E	0-140	50	7.0	15.62	14.00	6.500	60	182.00

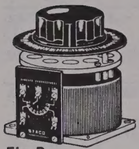


Fig. B

240 VOLT INPUT SINGLE PHASE PANEL MOUNTING

Identical to above except 240 volt operation.

252	A	0-240/264	0.8	.19	2.812	2.437	2.437	3.5	19.50
1020	B	0-240/280	3.5	.98	5.312	5.000	4.187	12	30.00
1020CT	C	0-240/280	3.5	.98	6.875	5.000	4.437	12	37.00
1220	B	0-240†	5.0	1.2	5.312	5.000	4.187	12	32.00
1220CT	C	0-240†	5.0	1.2	6.875	5.000	4.437	12	40.00
1520	D	0-240/280	9.5	2.7	6.125	6.625	4.812	20	48.00
1520CT	E	0-240/280	9.5	2.7	6.375	9.125	5.000	20	54.00
2520	D	0-240/280	10	2.8	8.187	7.625	4.125	23	67.00
2520CT	E	0-240/280	10	2.8	9.625	7.625	4.125	23	80.00
5020	D	0-240/280	28	7.8	12.50	12.50	6.500	60	162.00
5020CT	E	0-240/280	28	7.8	15.62	14.00	6.500	60	182.00

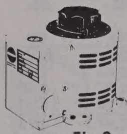


Fig. C

120 VOLT INPUT SINGLE PHASE CORD & PLUG TYPE

All units feature a protective housing for coil and terminal board; have line cord, matching receptacle, switch, pilot light and fuse; are connected for clockwise knob rotation. Prefix 2PF indicates two conductor line cord and receptacle; 3PN indicates three-conductor grounded line cord and receptacle.

2PF171	F	0-132*	1.75	.23	3.937	3.937	3.500	3.5	23.00
3PN171	F	0-132*	1.75	.23	3.937	3.937	3.500	3.5	25.00
2PF371	F	0-120/140*	3.75	.53	5.375	6.062	5.625	7.0	28.00
3PN371	F	0-120/140*	3.75	.53	5.375	6.062	5.625	7.0	30.00
2PF501	F	0-120/140	5.0	.70	5.375	6.062	5.625	9.0	32.00
3PN501	F	0-120/140	5.0	.70	5.375	6.062	5.625	9.0	35.00
2PF1010	G	0-120/140	10	1.4	5.000	6.875	5.625	12	34.00
3PN1010	G	0-120/140	10	1.4	5.000	6.875	5.625	12	40.00
2PF1210	G	0-120†	12	1.4	5.000	6.875	5.625	12	40.00
3PN1210	G	0-120†	12	1.4	5.000	6.875	5.625	12	44.00
2PF1510	H	0-120/140	15	2.1	5.875	6.375	9.000	21	63.50
3PN1510	H	0-120/140	15	2.1	5.875	6.375	9.000	21	63.50
2PF2210	H	0-140	22	2.4	5.625	7.625	10.75	24	94.00
3PN2210	H	0-140	22	2.4	5.625	7.625	10.75	24	94.00

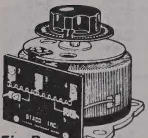


Fig. D

240 VOLT INPUT SINGLE PHASE CORD & PLUG TYPE

Identical to above except 240 volt operation

2PF1020	G	0-240/280	3.5	.98	5.000	6.875	5.625	12	39.00
3PN1020	G	0-240/280	3.5	.98	5.000	6.875	5.625	12	46.00
2PF1220	G	0-240†	5.0	1.2	5.000	6.875	5.625	12	45.00
3PN1220	G	0-240†	5.0	1.2	5.000	6.875	5.625	12	47.00
2PF1520	H	0-240/280	9.5	2.7	5.875	6.375	9.000	21	63.50
3PN1520	H	0-240/280	9.5	2.7	5.875	6.375	9.000	21	63.50
2PF2520	H	0-280	10	2.8	5.625	7.625	10.75	24	94.00
3PN2520	H	0-280	10	2.8	5.625	7.625	10.75	24	94.00

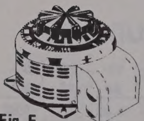


Fig. E

120 VOLT INPUT METERED CORD & PLUG TYPES

New metered variable transformers eliminate the need for separate metering. Incorporates a high quality full view voltmeter located atop the enclosure for easy, accurate readout.

2PF1010V	I	0-140	10	1.4	5.000	6.875	5.625	12	54.75
3PN1010V	I	0-140	10	1.4	5.000	6.875	5.625	12	56.75

240 VOLT INPUT METERED CORD & PLUG TYPES

Identical to above except 240 volt operation.

2PF1020V	I	0-280	3.5	.98	5.000	6.875	5.625	12	62.75
3PN1020V	I	0.280	3.5	.98	5.000	6.875	5.625	12	64.75

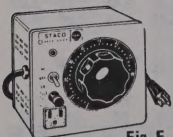


Fig. F

120 VOLT INPUT DELUX VARIABLE ISOLATION TRANSFORMERS

The output voltage is completely isolated from the power line. Units have additional outputs of: Voltage doubler, series and non-isolated.

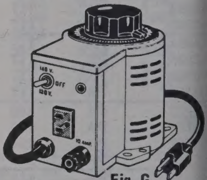
J201	B	0-140	2.0	.28	5.312	5.000	4.750	7.0	41.00
J401	D	0-140	4.0	.56	6.125	6.625	4.437	13	90.00
J901	D	0-140	9.0	1.2	8.817	7.625	4.750	25	121.00

*60 cycle operation only at over voltage. †60 cycle operation only. ★Include complete Cat. No. when ordering, i.e. 460-171.

ISOLATION AND AUTO– TRANSFORMERS

SINGLE PHASE

Widely used as basic components in the control of voltage, current, power in many industrial and lab applications. Staco variable transformers deliver continuously adjustable output voltage from AC power lines without waveform distortion. All models offer precious metal-plated commutators, excellent regulation, high efficiency, conservative ratings and feature extremely rugged construction which includes a high temperature foundation material for the commutator surface. This material provides a transformer with a greater tolerance to transients and short term overloads, effectively increasing the reliability of the transformer. Staco variable transformers are electrically and mechanically interchangeable with competitive products.


140 V.
OFF
120 V.
10 amp
Fig. G

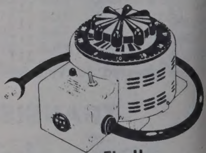


Fig. H

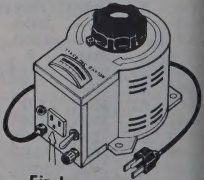
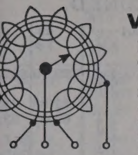
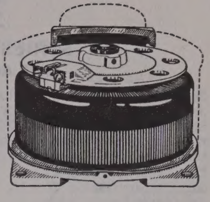


Fig. I

SUPERIOR POWERSTAT®

VARIABLE VOLTAGE AUTO-TRANSFORMERS

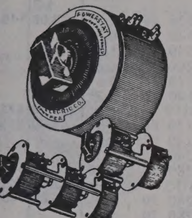




POWERSTAT® variable transformers are auto-transformers of toroidal core design, with a movable brush which can be rotated to give any desired output voltage from zero to or above the input voltage. They provide excellent regulation, high efficiency, conservative ratings, zero waveform distortion and rugged construction. The new POWERCOTE® feature encloses the toroidal winding in a high temperature material which holds the winding firmly in place even under severe overloads, gives increased resistance to fungus, salt spray and contaminating atmospheres, and assures longer life. The units listed here are for manual operation. Motor-driven units are also available. POWERSTAT® catalogs are available for users who require more complete electrical and dimensional information.

SERIES 10B-12

2.25 AMP. MAX.



For controlling small loads. Models shown here are panel mounting types. Suffix -2 and -3 indicates number of ganged units. Required panel space: single 2.812" dia.; dual and triple 3.875" dia. Depth behind panel: single 2.062"; dual 5.125"; triple 8.125". Shaft .250" dia. *1 phase series connected. †3 phase open delta. ‡3 phase wye. Output rating for constant current loads. #On metal panel, otherwise derate to 1.75 amps.

	Input			Output			Ea.	10-
	Hz	φ	V.	V.	A.	KVA	1-9	24
10B	60	1	120	0-132	2.25#	0.13	$13.40	$12.06
							Ea. 1-3	4-9
10B-2	60	1*	240	0-264	2.25#	0.59	$37.50	$33.75
	60	1†	120	0-132	2.25#	0.51		
10B-3	60	1‡	240	0-240	2.25#	0.94	62.00	55.80

SERIES 12

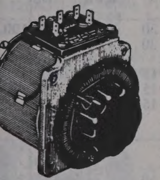
0.7 AMP. MAX.

en construction for back of panel mounting. Same size and earance as Series 10B-12 above. *1 phase series connected. †3 se open delta. ‡3 phase wye connected. For constant current ds. #On metal panel, otherwise derate to 0.5 amp.

	Input			Output			Ea.	10-
	Hz	φ	V.	V.	A.	KVA	1-9	24
12	50/60	1	240	0-240	0.7#	0.34	$20.00	$18.45
	50/60	1	240	0-264	0.5	0.13		
							Ea. 1-3	4-9
12-2	50/60	1*	480	0-480	0.7#	0.34	$56.00	$50.40
	50/60	1*	480	0-528	0.5	0.26		
	50/60	3†	240	0-240	0.7#	0.29		
	50/60	3†	240	0-264	0.5	0.23		
12-3	50/60	3‡	480	0-480	0.7#	0.58	86.00	77.40
	60	3‡	480	0-528	0.5	0.46		

SERIES 21-22

4.5 AMPS MAX.

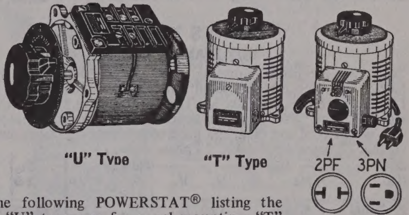


.375" round shaft may be used from either end. Required panel space 3.750" wide x 4.812" high. Depths behind panel: single unit 4.562"; dual 7.500"; triple 10.937". Suffix -2 and -3 indicates ganged units. *1 phase series connected. †3 phase open delta. ‡3 phase wye connected.

	Input			Output			Ea.	10-
	Hz	φ	V.	V.	A.	KVA	1-9	24
21	50/60	1	120	0-120	4.50	0.54	$19.50	$17.55
	50/60	1	120	0-140	4.50	0.63		
22	50/60	1	240	0-240	2.5	0.60	29.00	26.10
	50/60	1	240	0-280	2.5	0.70		
							Ea. 1-3	4-9
21-2	50/60	1*	240	0-240	4.50	1.10	$56.00	$50.40
	50/60	1*	240	0-280	4.50	1.30		
	50/60	3†	120	0-120	4.50	0.94		
	50/60	3†	120	0-140	4.50	1.10		
22-2	50/60	1*	480	0-480	2.5	1.20	75.00	67.50
	50/60	1*	480	0-560	2.5	1.40		
	50/60	3†	240	0-240	2.5	1.00		
	50/60	3†	240	0-280	2.5	1.20		

POWERSTAT® SERIES 21-22 CONTINUED

Cat.	Input			Output			Ea.	4-
No.	Hz	φ	V.	V.	A.	KVA	1-3	9
27-21-3	50/60	3‡	240	0-240	4.50	1.90	$88.00	$79.20
	60	3‡	240	0-280	4.50	2.20		
27-22-3	50/60	3‡	480	0-480	2.5	2.10	118.00	106.20
	60	3‡	480	0-560	2.5	2.40		



"U" Type "T" Type

In the following POWERSTAT® listing the open "U" types are for panel mounting. "T" types have a protective metal housing. "PN" types are bench units, include an output receptacle, 6-ft. power cord and plug, and protective fuse. Suffix -2 and -3 indicates ganged units. *1 phase series connected. †3 phase open delta. ‡3 phase wye.

SERIES 116B-216B

10/3.5 AMPS MAX.

.375" dia. shaft may be used from either end. Panel space required is 5.750" dia. Depths behind panel: single unit 5.250"; dual unit 10.875"; triple unit 16.500".

Cat.	Input			Output			Ea.	10-
No.	Hz	φ	V.	V.	A.	KVA	1-9	24
27-116BU	50/60	1	120	0-120	10.0	1.2	$26.00	$23.40
	50/60	1	120	0-140	10.0	1.4		
27-116BT	Same ratings as 116BU						34.00	30.60
27-216BU	50/60	1	240	0-240	3.5	0.98	31.00	27.90
	50/60	1	240	0-280	3.5	0.42		
27-216BT	Same ratings as 216BU						38.00	34.20
							Ea. 1-3	4-9
27-116BU-2	50/60	1*	240	0-240	10.0	2.4	$68.00	$61.20
	50/60	1*	240	0-280	10.0	2.8		
	50/60	3†	120	0-120	10.0	2.1		
	50/60	3†	120	0-140	10.0	2.4		
27-116BT-2	Same ratings as 116BU-2						84.00	75.60
27-116BU-3	50/60	3‡	240	0-240	10.0	4.2	95.00	85.50
	60	3‡	240	0-280	10.0	4.8		
27-116BT-3	Same ratings as 116BU-3						121.00	108.90
27-216BU-2	50/60	1*	480	0-480	3.5	1.7	78.00	70.20
	50/60	1*	480	0-560	3.5	2.0		
	50/60	1*	240	0-560	3.5	0.85		
	50/60	3†	240	0-240	3.5	1.5		
	50/60	3†	240	0-280	3.5	1.7		
	50/60	3†	120	0-280	3.5	0.74		
27-216BT-2	Same ratings as 216BU-2						98.00	88.20
27-216BU-3	50/60	3‡	480	0-480	3.5	2.9	109.00	98.10
	60	3‡	480	0-560	3.5	3.4		
	60	3‡	240	0-560	3.5	1.5		
27-216BT-3	Same ratings as 216BU-3						134.00	120.60
							1-9	10-24
27-3PN116B	Same ratings as 116BU, bench type						$41.00	$36.90
27-3PN216B	Same ratings as 216BU, bench type						47.50	42.75

SUPERIOR POWERSTATS®

SERIES 117B-217B

12/5 AMPS MAX.

Same physical dimensions and appearance as Series 116-216 shown on the preceding page. "U" types for panel mounting. "T" types have a protective housing. "PF" and "PN" types are bench units with output receptacle, 6-ft. power cord and plug, and protective fuse. *1 phase series connected. †3 phase open delta. ‡3 phase wye.

Cat. No.	Input Hz	Ø	V.	Output V.	A.	KVA	Ea. 1-9	10-24
27-117BU	60	1	120	0-120	12	1.4	$28.00	$25.20
27-117BT	Same ratings as 117U						36.00	32.40
27-217BU	60	1	240	0-240	5	1.2	33.00	29.70
27-217BT	Same ratings as 217BU						41.00	36.90
							Ea. 1-3	4-9
27-117BU-2	60	1*	240	0-240	12	2.9	$74.00	$66.60
	60	3†	120	0-120	12	2.5		
27-117BT-2	Same ratings as 117BU-2						91.00	81.90
27-217BU-3	60	3‡	480	0-480	5	4.2	117.00	105.30
27-217BT-3	Same ratings as 217BU-3						143.00	128.70
							Ea. 1-9	10-24
27-2PF117B	Same ratings as 117BU, bench type						$41.00	$36.90
27-3PN117B	Same ratings as 117BU, bench type						45.50	40.95
27-2PF217B	Same ratings as 217BU, bench type						46.50	41.85
27-3PN217B	Same ratings as 217BU, bench type						48.50	43.65

SERIES 126-226

15/7.5 AMPS MAX.

"U" types are panel mounting. Panel mounting space 6" wide x 6.812" high. Depth behind panel: single 4.156"; dual 9.500"; triple 14". Removeable .375" dia. shaft. "T" types have protective housing. "PF" and "PN" types are bench units with output receptacle, 6-ft. power cord and plug, and protective fuse. *1 phase series connected. †3 phase open delta. ‡3 phase wye.

Cat. No.	Input Hz	Ø	V.	Output V.	A.	KVA	Ea. 1-9	10-24
27-126U	50/60	1	120	0-120	15	1.8	$47.50	$42.75
	50/60	1	120	0-140	15	2.1		
27-126T	Same ratings as 126U						58.00	52.20
27-226U	50/60	1	240	0-240	7.5	1.8	47.50	42.75
	50/60	1	240	0-280	7.5	2.1		
	50/60	1	120	0-280	7.5	0.91		
27-226T	Same ratings as 226U						58.00	52.20
							Ea. 1-3	4-9
27-126U-2	50/60	1*	240	0-240	15	3.6	109.00	98.10
	50/60	1*	240	0-280	15	4.2		
	50/60	3†	120	0-120	15	3.1		
	50/60	3†	120	0-140	15	3.6		
27-126T-2	Same ratings as 126U-2						129.00	116.10
27-126U-3	50/60	3‡	240	0-240	15	6.2	171.00	153.90
	60	3‡	240	0-280	15	7.3		
27-126T-3	Same ratings as 126U-3						200.00	180.00
27-226U-2	50/60	1*	480	0-480	7.5	3.6	109.00	98.10
	50/60	1*	480	0-560	7.5	4.2		
	50/60	1*	240	0-560	7.5	1.8		
	50/60	3†	240	0-240	7.5	3.1		
	50/60	3†	240	0-280	7.5	3.6		
	50/60	3†	120	0-280	7.5	1.6		
27-226T-2	Same ratings as 226U-2						129.00	116.10
27-226U-3	50/60	3‡	480	0-480	7.5	6.2	171.00	153.90
	60	3‡	480	0-560	7.5	7.3		
	60	3‡	240	0-560	7.5	3.2		
27-226T-3	Same ratings as 226U-3						200.00	180.00
							1-9	10-24
27-2PF126	Same ratings as 126U, bench type						$67.00	$60.30
27-2PF226	Same ratings as 226U, bench type						67.00	60.30
27-3PN126	Same ratings as 126U, bench type						67.00	60.30
27-3PN226	Same ratings as 226U, bench type						67.00	60.30

SERIES 136B-236B

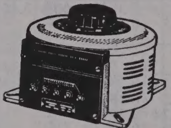
22/10 AMPS MAX.

"U" types for panel mounting. Panel mounting space 7.500" wide x 8.687" high. Depth behind panel: single 4.312"; dual 10.625"; triple 16.062". Removeable .500" shaft. "T" type has protective housing. "PF" and "PN" types have output receptacle, 6-ft. power cord and plug, and protective fuse. §Parallel operation, requires T5000 choke. *1 phase series connected. †3 phase open delta. ‡3 phase wye. #Parallel operation, requires T5579B choke.

Continued in next column.

SERIES 136B-236B CONT'D.

Cat. No.	Input Hz	Ø	V.	Output V.	A.	KVA	Ea. 1-9	10-24
27-136BU	50/60	1	120	0-120	22	2.6	$69.00	$62.10
	50/60	1	120	0-140	22	3.1		
27-136BT	Same ratings as 136BU						82.00	73.80
27-236BU	50/60	1	240	0-240	10	2.4	69.00	62.10
	50/60	1	240	0-280	10	2.8		
	50/60	1	120	0-280	10	1.2		
27-236BT	Same ratings as 236 BU						82.00	73.80
							Ea. 1-3	4-9
27-136BU-2	50/60	1§	120	0-120	44	5.3	163.00	146.70
	50/60	1§	120	0-140	44	6.2		
	50/60	1*	240	0-240	22	5.3		
	50/60	1*	240	0-280	22	6.2		
	50/60	3†	120	0-120	22	4.6		
	50/60	3†	120	0-140	22	5.3		
27-136BT-2	Same ratings as 136BU-2						191.00	171.90
27-136BU-3	50/60	1#	120	0-120	66	7.9	241.00	216.90
	50/60	1#	120	0-140	66	9.2		
	50/60	3‡	240	0-240	66	9.1		
	60	3‡	240	0-280	66	10.7		
27-136BT-3	Same ratings as 136BU-3						282.00	253.80
27-236BU-2	50/60	1§	240	0-240	20	4.8	163.00	146.70
	50/60	1§	240	0-280	20	5.6		
	50/60	1§	120	0-280	20	2.4		
	50/60	1*	480	0-480	10	4.8		
	50/60	1*	480	0-560	10	5.6		
	50/60	1*	240	0-560	10	2.4		
	50/60	3†	240	0-240	10	4.2		
	50/60	3†	240	0-280	10	4.8		
	50/60	3†	120	0-280	10	2.1		
27-236BT-2	Same ratings as 236BU-2						191.00	171.90
27-236BU-3	50/60	1#	240	0-240	30	7.2	241.00	216.90
	50/60	1#	240	0-280	30	8.4		
	50/60	1#	120	0-280	30	3.6		
	50/60	1‡	480	0-480	10	8.3		
	60	1‡	480	0-560	10	9.7		
	60	1‡	240	0-560	10	4.2		
27-236BT-3	Same ratings as 236BU-3						282.00	253.80
							Ea. 1-9	10-24
27-2PF136B	Same ratings as 136BU, bench type						97.00	87.30
27-3PN136B	Same ratings as 136BU, bench type						97.00	87.30
27-2PF236B	Same ratings as 236BU, bench type						97.00	87.30
27-3PN236B	Same ratings as 236BU, bench type						97.00	87.30



SERIES 146-246

30/15 AMPS MAX.

"U" types require 9.437" wide x 9.375" high panel space. Depth behind panel: single 4.718"; dual 10.843"; triple 15.968". .500" shaft is removeable, may be used from either end. "T" types are enclosed in a protective housing.

Cat. No.	Input Hz	Ø	V.	Output V.	A.	KVA	Ea. 1-3	4-9
27-146U	50/60	1	120	0-120	30	3.6	$112.00	100.80
	50/60	1	120	0-140	30	4.2		
27-146T	Same ratings as 146U						128.00	115.20
27-246U	50/60	1	240	0-240	15	3.6	112.00	100.80
	50/60	1	240	0-280	15	4.2		
	50/60	1	120	0-280	15	1.8		
27-246T	Same ratings as 246U						128.00	115.20
							Ea. 1-3	4-9
27-146U-2	50/60	1‡‡	120	0-120	60	7.2	254.00	228.60
	50/60	1‡‡	120	0-140	60	8.4		
	50/60	1*	240	0-240	30	7.2		
	50/60	1*	240	0-280	30	8.4		
	50/60	3†	120	0-120	30	6.2		
	50/60	3†	120	0-140	30	7.3		
27-146T-2	Same ratings as 146U-2						283.00	254.70
27-246U-2	50/60	1§	240	0-240	30	7.2	254.00	228.60
	50/60	1§	240	0-280	30	8.4		
	50/60	1§	120	0-280	30	3.6		
	50/60	1*	480	0-480	15	7.2		
	50/60	1*	480	0-560	15	8.4		
	50/60	1*	240	0-560	15	3.1		
	50/60	1†	240	0-240	15	6.2		
	50/60	1†	240	0-280	15	7.3		
	50/60	1†	120	0-280	15	3.2		
27-246T-2	Same ratings as 246U-2						283.00	254.70

Continued on next page.

SUPERIOR POWERSTATS®

SERIES 146-246 CONT'D.

t.	---- Input---			---- Output--------			Ea.	4-
.	Hz.	Ø	V.	V.	A.	KVA	1-3	9
-146U-3	50/60	1§	120	0-120	90	10.8	$377.00	$339.30
	50/60	1§	120	0-140	90	12.6		
	50/60	3‡	240	0-240	30	12.5		
	60	3‡	240	0-280	30	14.5		
-146T-3	Same ratings as 146U3						419.00	377.10
-246U-3	50/60	1#	240	0-240	45	10.8	377.00	339.30
	50/60	1#	240	0-280	45	12.6		
	50/60	1#	120	0-280	45	5.5		
	50/60	3‡	480	0-480	15	12.5		
	60	3‡	480	0-560	15	14.5		
	60	3‡	240	0-560	15	6.3		

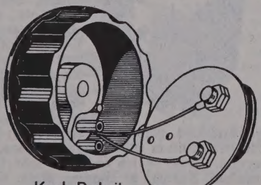
rallel operation requires ‡‡ T6053 choke; § T5000 choke; § § 065 choke; # T5579B choke.

SERIES 1156D-1256D
50/28 AMPS MAX.

Basic open construction type "U" measures 13.875" across flats, is 7.687" deep behind panel. -2 ganged units are 14.312" deep, -3 units are 20.937" deep. These units are available in practically limited combinations for series, parallel, open delta or wye conctions. Write for complete specifications, price and delivery.

t.	------ Input----			----- Output -------			Ea.	4-
.	Hz.	Ø	V.	V.	A.	KVA	1-3	9
-1156DU	50/60	1	120	0-120	50	6.0	$169.00	$152.10
	50/60	1	120	0-140	50	7.0		
-1256DU	50/60	1	240	0-240	28	6.7	169.00	152.16
	50/60	1	120	0-280	28	7.8		
	50/60	1	120	0-280	28	3.4		
-1156DU-2D	50/60	3†	120	0-120	50	10.4	357.00	321.30
	50/60	3†	120	0-140	50	12.1		
-1156DU-2P	50/60	1	120	0-120	100	12.0	382.00	343.80
	50/60	1	120	0-140	100	14.0		
-1156DU-2S	50/60	1*	240	0-240	50	12.0	357.00	321.30
	50/60	1*	240	0-280	50	14.0		
-1156DU-3P	50/60	1	120	0-120	150	21.0	666.00	599.40
	50/60	1	120	0-140	150	24.0		
-1156DU-3Y	50/60	3‡	240	0-240	50	20.8	633.00	569.70
	60	3‡	240	0-280	50	24.2		
-1256DU-2D	50/60	3†	240	0-240	28	11.6	357.00	321.30
	50/60	3†	240	0-280	28	13.6		
	50/60	3†	120	0-280	28	5.9		
-1256DU-2P	50/60	1	240	0-240	56	13.4	382.00	343.80
	50/60	1	240	0-280	56	15.7		
	50/60	1	120	0-280	56	6.8		
-1256DU-2S	50/60	1*	480	0-480	28	13.4	357.00	321.30
	50/60	1*	480	0-560	28	15.7		
	50/60	1*	240	0-560	28	6.8		
-1256DU-3P	50/60	1	240	0-240	84	20.2	666.00	599.40
	50/60	1	240	0-280	84	23.5		
	50/60	1	120	0-280	84	10.2		
-1256DU-3Y	50/60	3‡	480	0-480	28	23.3	633.00	569.70
	60	3‡	480	0-560	28	27.2		
	60	3‡	240	0-560	28	11.8		

nnections: "D" types 3 phase open delta; "Y" types 3 phase wye; " types 1 phase series; "P". types 1 phase parallel, require ualizing chokes.

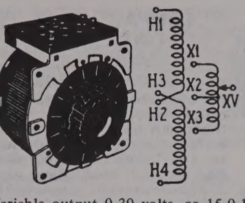


CONTROL KNOBS

Knob Detail

r constant monitoring of the output of POWERSTAT® Variable ansformers. Knob turns freely but meter remains in vertical poion for easy reading. May be used on 21-22, 116B-216B, 117B-7B, 126-226, 136B-236B and 146-246 Powerstats: Meter acracy 2.5%.

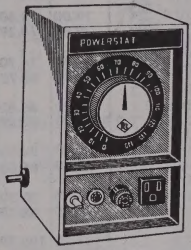
t. .	Meter Range	Ea. 1-9	10- Up
-VS150	0-150 V-AC Scale	$47.50	$42.75
-VS300	0-300 V-AC Scale	47.50	42.75



SERIES LW136
35 AMPS MAX.

Consists of two 120 volt primary windings (H1-H2 & H3-H4) and an isolated 30 volt (X1-X3) center tapped variable secondary winding. Primaries may be connected series for 220-v input, or parallel for 110-v input. Variable output 0-30 volts, or 15-0-15 volts. By connecting the variable secondary in series with the primary the LW136 may be used as a limited range autotransformer or line corrector.

Cat.	---Input-----			------Output--			Ea.	10-
No.	Hz	Ø	V.	V.	A.	KVA	1-9	24
27-LW136BU	50/60	1	120	15-0-15	35	0.52	101.00	$90.90
	50/60	1	120	0-30	25	0.75		
	50/60	1	240	15-0-15	35	0.52		
	50/60	1	240	0-30	25	0.75		
27-LW136B	Same as LW136BU above but with protective enclosure and base for bench mounting.						108.00	97.20



ENCLOSED POWERSTATS®

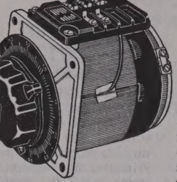
Portable single phase units for laboratory, shop or bench use. Each is equipped with a grounded NEMA power cord and plug, on/off switch, output receptacle, pilot light and protective fuse. A slot in the rear of each unit accepts a wall mounting bracket furnished with the unit. Models N116BK and N116BLK have an a-c voltmeter in the knob to read output voltages. The meter remains stationary in a vertical position when the control knob is rotated.

Cat.	--Input--		---------Output---------			Ea.	10-
No.	Hz	V.	V.	A.	KVA	1-9	24
27-N10B	60	120	0-132	2.25	0.30	$31.00	$27.90
27-N21	50/60	120	0-140	4.50	0.63	43.50	39.15
27-N116B	50/60	120	0-140	10.00	1.40	51.00	45.90
27-N116BL	50/60	120	0-120	10.00	1.20	51.00	45.90
WITH METERED KNOB							
27-N116BK	50/60	120	0-140	10.00	1.40	93.00	83.70
27-N116BLK	50/60	120	0-120	10.00	1.20	93.00	83.70

REPLACEMENT BRUSHES

Cat. No.	Used On Powerstats	Ea. 1-99	100- Up
27-RB10	10B	$1.50	$1.35
27-RB10B-40	10B-40	1.50	1.35
27-RB12	12	1.50	1.35
27-RB21	21	2.00	1.80
27-RB21-40	21-40	2.00	1.80
27-RB22	22	2.00	1.80
27-RB116B	116B, UC1MB	2.00	1.80
27-RB116B-40	116BU-40	2.00	1.80
27-RB117B	117B	2.00	1.80
27-RB216B	216B,	2.00	1.80
27-RB217B	217B,	2.00	1.80
27-RB116B	116B, UC1MB	2.00	1.80
27-RB216B	216B	2.00	1.80
27-RBQ116	Q116U	2.00	1.80
27-RBQ117	Q117U	2.00	1.80
27-RBQ216	Q216U	2.00	1.80
27-RBQ217	Q217U	2.00	1.80
27-RB126	126	3.00	2.70
27-RB226	226	3.00	2.70
27-RB136	136B, LC2106D, LC3220YD	3.00	2.70
27-RB236	236B, LC2207D, LC3425YD	3.00	2.70
27-RBLW136	LW136B	4.00	3.60
27-RB146	146	4.00	3.60
27-RB246	246	4.00	3.60
27-RB1156B	1156D, LC2115E, LC2418E	4.50	4.05
27-RB1256B	1256D, LC2228E, LC3207DE	4.50	4.05

SUPERIOR



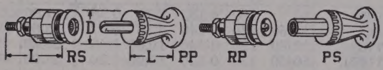
COMPACT TYPE Q POWERSTATS

VARIABLE TRANSFORMERS

For applications where space is a critical factor. Compact, square-frame units measuring 4.25" wide x 4.875" overall height. Single units are 3.937" deep behind the panel, dual units (-2) are 8" deep, triple units (-3) are 12.062" deep. .375" diameter shaft is removeable, may be used from front or back. 4 mounting holes, on 3.5" x 3.5" centers, are tapped for .250" bolts.

Cat. No.	Input Hz	Input Ø	Input V.	Output V.	Output A.	Output KVA	Ea. 1-9	10-24
27-Q116U	50/60	1	120	0-120	9.0	1.1	**$26.00**	**$23.40**
				0-140	9.0	1.3		
27-Q117U	60	1	120	0-120	10.0	1.2	**28.00**	**25.20**
27-Q216U	50/60	1	240	0-280	3.5	0.98	**31.00**	**27.90**
		1	120	0-260	3.5	0.42		
27-Q217U	60	1	240	0-240	5.0	1.2	**33.00**	**29.70**
							Net 1-3	**4-9**
27-Q116U-2	50/60	1*	240	0-240	9.0	2.2	**$67.50**	**$60.75**
				0-280	9.0	2.5		
27-Q117U-2	60	1*	240	0-240	10.0	2.4	**74.00**	**66.60**
27-Q216U-2	50/60	1*	480	0-560	3.5	2.0	**78.00**	**70.20**
			240	0-560	3.5	0.85		
27-Q217U-2	60	1*	480	0-480	5.0	2.4	**83.00**	**74.70**
27-Q116U-2	50/60	3†	120	0-120	9.0	1.9	**67.50**	**60.75**
				0-140	9.0	2.2		
27-Q117U-2	60	3†	120	0-120	10.0	2.1	**74.00**	**66.60**
27-Q216U-2	50/60	3†	240	0-280	3.5	1.7	**78.00**	**70.20**
			120	0-280	3.5	0.74		
27-Q217U-2	60	3†	240	0-240	5.0	2.1	**83.00**	**74.70**
27-Q116U-3	50/60	3‡	240	0-240	9.0	3.8	**95.00**	**85.50**
	60			0-280	9.0	4.4		
27-Q117U-3	60	3‡	240	0-240	10.0	4.2	**101.00**	**90.90**
27-Q216U-3	60	3‡	480	0-560	3.5	3.4	**109.00**	**98.10**
			240	0-560	3.5	1.5		
27-Q217U-3	60	3‡	480	0-480	5.0	4.2	**117.00**	**105.30**

*Series connected. †3 Ø open delta. ‡3 Ø wye connected.



SUPERCON CONNECTORS

For power distribution and supply panels. Rated for 125/250 v-ac/dc current breaking, 600 v. disconnect only. Metal parts are gold plated brass. Conductors may be locked in place with set screws, or soldered. Insulating bodies are molded of tough nylon. *When ordering specify color by adding suffix -B black, -R red, -Y yellow, -BL blue, -GN green, or -WT white to catalog number.

25 AMPERE TYPES

Pin diameter 5/32". Max. conductor size #12 AWG of ¼" O.D.

Cat. No.	Dia. "D"	Lgth. "L"	Mtg. Hole	Panel	Ea. 1-19	20-99	100-199
27-RS25G*	13/16"	1-5/16"	11/16"	3/16"	**$2.80**	**$2.24**	**$1.96**
27-PP25G*	13/16"	2"	.....	.....			
27-RP25G*	13/16"	1-5/16"	11/16"	3/16"			
27-PS25G*	13/16"	2"	.....	.....			

50 AMPERE TYPES

Pin diameter ¼". Max. conductor size #4 AWG of ½" O.D.

27-RS50G*	1¼"	1-23/32"	1"	¼"	**$3.65**	**$2.92**	**$2.56**
27-PP50G*	1"	2¼"	...	...			
27-RP50G*	1¼"	1-23/32"	1"	¼"			
27-PS50G*	1"	2¼"	...	...			

100 AMPERE TYPES

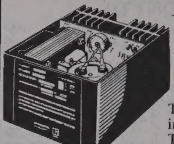
Pin diameter 5/16". Max. conductor size #2 AWG of 5/8" O.D.

27-RS100G*	1½"	2¼"	1-3/16"	¼"	**$4.75**	**$3.80**	**$3.33**
27-PP100G*	1¼"	2½"	......	...			
27-RP100G*	1½"	2¼"	1-3/16"	¼"			
27-PS100G*	1¼"	2½"	......	...			

250 AMPERE TYPES

27-RS250G*	2"	3-9/16"	1-9/16"	¼"	**$8.15**	**$6.52**	**$5.71**
27-PP250G*	1½"	3-5/16"	.....	...			
27-RP250G*	2"	3-9/16"	1-9/16"	¼"			
27-PS250G*	1½"	3-5/16"	.....	...			

TRIAD



TRIAD POWER SUPPLIES

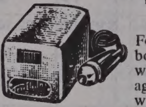
ADJUSTABLE, REGULATED 40-W GUARANTEED FOR ONE YEAR

The WR series has open top construction instead of a completely closed black box. Triad uses an extruded integral heat sink housing; all silicon semiconductors; 10 year life computer grade capacitors; FR glass epoxy printed circuit boards; electrostatically shielded transformers. All units are convection cooled, have automatic current limiting and are designed to meet UL-CSA requirements. Mean time before failure is 50,000 hours per MIL-HKBK-217. Fully guaranteed for one year. Input specifications: 115V ±10%, 47-440Hz, regulation: line: ±0.1%, load: ±0.2% with 50% load change. Ripple: 2MV RMS, 6MV pk to pk. Operating temperature range: 0°C to +40°C to +65°C derated, with a typical temperature coefficient of 0.03%/°C. Transient response: 100 microseconds max., 50 microseconds adv. May be positive or negative ground. Size: 4" x 4 5/16" x 6 1/2".

Cat. No.	Voltage Range 47-70Hz	Voltage Range 70-440Hz	Current	Net 1-9	10-24
322-WR-48	4-8V	4-7V	5.0a	**$57.50**	**$54.50**
322-WR-1116	11-16V	11-15V	2.5a		
322-WR-2126	21-26V	21-25V	1.5a		
322-WR-2630	26-30V	26-30V	1.4a		

TERADO POWER INVERTERS

12 V-DC TO 115 V-AC, 60 CPS.



For operating small a-c appliances from a car, boat or airplane battery. Frequency stable within 1 cps with change in load or input voltage. When selecting an inverter choose one with 25% greater capacity than the maximum load required for the a-c equipment you will be operating.

VIBRATOR PLUG-IN MODELS

Furnished with input cord and plug which fits cigarette lighter. Standard receptacle for A-C output. All models equipped with a "hash filter." Output volts 115V-AC, 60 cps.

Cat. No.	Watts Output	Size W. x D. x H.	Wt. Lbs.	Net Ea.
276-50-103	15-20W	3-5/8x2¼x4¼"	2	**$13.00**
276-50-116	40-50W	2½x4½x2¼"	3	**24.38**
276-50-122	60-75W	3½x6½x4"	6	**48.28**

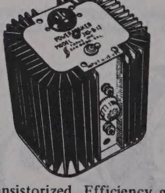
TRANSISTORIZED DIRECT CONNECTION

Frequency stable within ½ cps with change in load or input voltage. *With remote control, variable output voltage, voltage indicator and heavy 15 ft. battery cables. Output 115V-AC, 60 cps.

276-50-202*	550-600W	10¾ x 13 x 6"	60	**$369.50**
276-50-191*	275-300W	10¾ x 6 x 6"	30	**191.66**
276-50-200*	175-200W	10¾ x 6 x 6"	21	**141.00**
276-50-201	150-175W	10¾ x 6 x 6"	20	**110.95**

TOPAZ POWERMAKER

INPUT 11 TO 15 V-DC
OUTPUT 300 WATTS
115 V-AC 60 CPS

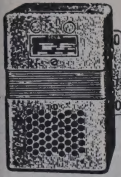


For use in automobiles, trucks, house trailers, boats, camp tents and cottages, etc., to operate household appliances, small power tools, radios or T-V sets, office equipment, incandescent or fluorscent lights, ship-to-shore telephones, transceivers, public address equipment, etc., from a 12-volt storage battery. Not recommended for compressor type refrigerators, Completely transistorized. Efficiency greater than 80% in both hot and cold climates. Built-in short circuit, overload and reverse polarity protection. On-off switch and pilot light. Ground type outlet accepts standard 2-prong or 3-prong plugs. Heat dissipating aluminum case is 5½" x 6-1/8" x 6-13/16" high. Weight 11 lbs., 14 oz. Furnished with battery cables, mounting hardware and instructions.

Cat. 411-315-B-12 POWERMAKER **Net Ea. $94.95**

REMOTE CONTROL for use with POWERMAKER permits use of shorter battery cables and increases efficiency. Small in size. Easily mounted under car or boat dash. Has on-off switch, pilot light, output receptacle and 8-foot power cord.

Cat. 411-310-R Remote Control **Net Ea. $24.95**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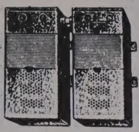

Y

SOLA CV SERIES

CONSTANT VOLTAGE TRANSFORMERS

OUTPUT VOLTAGES HELD CONSTANT TO ±1/2% WITH INPUT VOLTAGE FLUCTUATIONS TO ±15%

Standard sinusoidaltype CVS for 60Hz single phase for use when precise, constant voltages are required for efficient operation of electrical, electronic or photographic equipment. CV series transformers provide instantaneous correction of voltage surges or drops in power supply lines. Operation is completely automatic. No manual adjustments or supervision is needed. These units display fast regulating action, their response time is usually 1.5 cycles or less. With less than 3% total rms harmonic content in their output voltage wave, they are particularly suitable for use with rectifiers or other equipment which is sensitive to, or is affected by, harmonics in the supply voltage. Screw-type terminals are in end housing.

Cat. No.	See Fig.	Reg. Volts	Input Volts	Output VA	Shpg. Lbs.	Adapter Code	Size in Inches L	W	H	Net 1-9	10-49	50-99
107-23-13-030-2	W	118	95-130	30	8	C	6.125	5.187	3.250	$35.35	$31.10	$27.55
107-23-13-060-2	W	118	95-130	60	10	C	6.937	5.187	3.250	42.00	36.95	32.75
107-23-23-060-2	W	118	90-260x380-520	60	10	C	6.937	5.187	3.250	45.90	40.40	35.80
107-23-22-112-2	W	118	95-130x190-260	120	14	C	8.125	5.187	3.250	53.80	47.35	41.95
107-23-23-112-2	W	118	190-260x380-520	120	14	C	8.125	5.187	3.250	57.20	50.35	44.60
107-23-22-125	W	118	95-130x190-260	250	28	A	9.625	7.437	4.500	73.30	64.50	57.20
107-23-23-125	W	118	190-260x380-520	250	29	A	9.625	7.473	4.500	77.80	68.45	60.70
107-23-22-150	W	118	95-130x190-260	500	45	B	12.437	6.437	7.781	112.85	99.30	88.00
107-23-26-150	W	118x236	190-260x380-520	500	46	B	12.437	6.437	7.781	120.60	106.15	94.10
107-23-25-175	W	118x236	95-130x175-235x190-260	750	54	B	16.812	6.437	7.781	155.65	137.00	121.40
107-23-25-210	W	118x236	95-130x175-235x190-260	1000	72	–	17.875	6.875	7.781	189.55	166.80	147.85
107-23-26-210	W	118x236	190-260x380-520	1000	72	–	17.875	6.437	7.781	189.50	166.75	147.80
107-23-25-215	W	118x236	95-130x175-235x190-260	1500	128	–	19.031	10.562	10.687	255.45	224.80	199.25
107-23-25-220	W	118x236	95-130x175-235x190-260	2000	140	–	19.875	9.031	10.687	329.00	289.55	256.65
107-23-26-220	W	118x236	190-260x380-520	2000	148	–	19.875	9.031	10.687	330.00	291.00	257.00
107-23-25-230-3	W	118x136	95-130x175-235x190-260	3000	194	–	21.875	9.062	10.687	457.00	402.50	356.80
107-23-26-230	W	118x230	190-260x380-520	3000	196	–	21.875	9.031	10.687	457.00	402.50	356.80
107-23-25-250	Y	118x230	95-130x175-235x190-260	5000	335	–	20.812	9.031	25.812	714.50	628.75	557.30
107-23-26-250	Y	118x230	190-260x380-520	5000	342	–	20.812	9.031	25.812	714.50	628.75	557.30

D

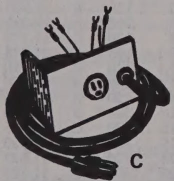
E

NORMAL HARMONIC TYPE CVN FOR 60Hz. SINGLE PHASE

For use with all loads not affected by harmonics in the supply voltage. These include filaments, relays, solenoids or other transformers. The CVN series include designs specifically engineered for use as built-in components. Output regulated to ±1/2% with input variations to as much as ±15%. Output voltage has 20% average total rms harmonic content. CVN transformers offer simplicity, reliability and freedom from maintenance.

Cat. No.	See Fig.	Reg. Volts	Input Volts	Output VA	Shpg. Lbs.	Adapter Code	Size in Inches L	W	H	Net 1-9	10-49	50-99
107-20-10-015	D	118	95-130	15	4	–	5.062	2.625	3.500	$24.60	$21.70	$19.20
107-20-14-015	E	118	95-130	15	3	–	2.343	4.312	2.437	22.00	19.50	17.30
107-20-14-030	E	118	95-130	30	5	–	2.343	4.312	3.312	22.80	20.05	17.80
107-20-13-030-2	W	118	95-130	30	7	C	5.875	5.187	3.250	30.30	26.60	23.60
107-20-13-060-2	W	118	95-130	60	10	C	6.343	5.187	3.250	33.25	29.25	25.95
107-20-14-060	E	118	95-130	60	8	–	3.125	4.812	3.875	28.30	24.90	22.10
107-20-14-112	E	118	95-130	120	11	–	3.125	4.812	4.812	43.60	38.40	34.00
107-20-13-112-2	W	118	95-130	120	12	C	7.375	5.187	3.250	43.60	38.35	34.00
107-20-21-112-2	W	236	190-260	120	13	C	7.375	5.187	3.250	43.60	38.35	34.00
107-20-13-115	W	118	95-130	150	22	A	8.750	7.437	4.500	52.90	46.55	41.25
107-20-22-125	W	118	95-130x190-260	250	25	B	11.062	6.437	5.906	64.60	56.85	50.40
107-20-23-125	W	118	190-260x380-520	250	25	B	11.125	6.437	5.906	65.20	57.40	50.85
107-20-22-150	W	118	95-130x190-260	500	36	B	12.312	6.437	5.906	100.00	88.00	78.00
107-20-26-150	W	118x236	190-260x380-520	500	37	B	12.312	6.437	5.906	107.40	94.50	83.80
107-20-22-210	W	118	95-130x190-260	1000	48	–	15.125	6.437	5.906	166.65	146.65	130.00
107-20-25-220	W	118x236	95-130x175-236x190-260	2000	128	–	20.000	9.031	8.375	273.75	240.90	213.55
107-20-25-230	W	118x236	95-130x175-236x190-260	3000	170	–	22.000	9.031	8.375	410.50	361.25	320.20
107-20-27-250	W	118x236	190-260x380-520	5000	290	–	21.000	12.625	11.875	644.85	567.50	503.00

A and B


C

CORD/RECEPTACLE ADAPTER KITS FOR CVS & CVN

Adapter kits may be used when the convenience of input plug and output receptacle is preferred to the standard arrangement of terminals in the transformer housing. Match letter under Adapter Code of CVS or CVN listing with proper letter in Adapter Kit listing.

Cat. 107-★	Adapter Code	Input Cord	Output Connection	Net Ea.
999-005	A	2-wire	2-wire recept.	$6.20
999-019	A	3-wire	3-wire recept.	6.20
999-009	B	2-wire	2-wire recept.	6.20
999-020	B	3-wire	3-wire recept.	6.20
999-104	C	2-wire	2-wire recept.	6.60
999-105	C	3-wire	3-wire recept.	6.60

★Include complete Cat. No. i.e. 107-999-005

FILAMENT VOLTAGE REGULATING TYPE CVF

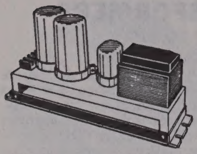
CVF series regulated filament transformers provide the stabilized voltage necessary for reliable operation, long life and low service expense. Output ±1% with ±15% input voltage variation. For 60 cycles single phase only.

Cat. No.	See Fig.	Input Volts	Reg. Volts	Output Amps	Output VA	Size in Inches L	W	H	Shpg. Lbs.	Net 1-9	10-49	50-99
107-20-06-015	E	95-130	6.0	2.50	15	2.687	4.312	2.437	3	$20.25	$19.60	$17.35
107-20-04-015	E	95-130	6.3	2.38	15	2.687	4.312	2.437	3	20.25	19.60	17.35
107-20-04-030	E	95-130x190-260	6.3	5.00	32	3.125	4.812	3.125	6	30.80	27.10	24.00
107-20-04-065	E	95-130x190-260	6.3	10.00	63	3.125	4.812	3.687	8	27.10	23.85	21.15
107-20-04-095	E	95-130x190-260	6.3	15.00	95	3.125	4.812	4.687	11	39.00	34.40	30.40
107-20-04-116	E	95-130x190-260	6.3	25.00	158	4.500	7.000	5.687	23	63.00	55.50	49.20

SOLA CV SERIES

SOLA CONSTANT VOLTAGE D-C SUPPLIES

FIXED OUTPUT CV-DC. INPUT 100-130 V-AC 60CPS.



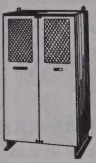
For computers, data processing, process control, electronic measuring, telemetering, and wherever isolation from line fluctuation is required. Sola CVDC power supplies are designed to handle rough voltage inputs. The CVDC will hold output voltage to ±1% or less for input variations as ±15% of normal input voltage. Actual variation is linear over a ±5% change in frequency from 60 cycles, approximately 1.4% voltage increase for a 1% frequency increase. Resistive loads (unity pf) within load rating will cause the normal output to drop from no load to full load. Inductive loads (lagging pf) will cause the normal output to decrease with power factor. Leading pf similarly causes a voltage rise. The total ripple content does not exceed 1% rms, on all standard CVDC power supplies described. All units have standard 19 inch rack mounting. Load regulation is given for 50% of full load.

Cat. 107-*	Reg. V	Output A	Load Reg.	Panel Ht. in.	Depth in.	Shpg. Lbs.	Net 1-4	5-9	10-24
281513-2	6	10	7.0	3.500	7.625	27	$132.50	$119.25	106.00
282123-1	6	15	7.0	5.250	7.250	38	136.00	122.50	108.75
281514-2	12	5	5.0	3.500	7.625	18	127.50	114.75	102.00
282124-1	12	10	5.0	5.250	7.250	31	133.00	119.75	106.50
281845-2	12	15	7.0	5.250	7.250	45	145.50	131.00	116.50
281515-2	18	5	4.0	3.500	7.625	20	136.00	122.50	108.75
282125-1	18	10	5.0	5.250	7.250	45	146.00	131.50	116.75
281024-1	24	6	4.0	5.250	9.750	30	137.00	123.25	109.50
282126-1	24	10	4.0	5.250	8.750	48	149.00	134.00	119.25
281203-2	24	15	5.0	7.000	7.250	64	155.00	139.50	124.00
282127-1	24	25	5.0	8.750	9.000	72	199.00	179.00	159.25
28626-2	28	8	4.0	5.250	8.750	42	142.50	132.75	118.00
282128-1	28	15	5.0	7.000	7.250	55	165.00	148.50	132.00
281048	48	4	2.5	5.250	9.750	32	141.25	127.25	113.00
281561-2	48	10	2.0	5.250	9.750	48	198.00	178.25	158.50
282129-1	48	20	2.5	8.750	9.750	95	235.00	211.50	188.00
281125-1	125	2	1.5	5.250	9.750	44	140.00	126.00	112.00
281150-1	150	2	1.5	5.250	9.750	48	144.50	130.00	115.50
281200	200	1	2.0	5.250	9.750	39	131.50	118.25	105.25
281250	250	1	2.0	5.250	9.750	45	131.50	118.25	105.25

SOLATRON FOR COMPUTERS

NEW LINE VOLTAGE REGULATORS FOR COMPUTERS

With the problems of low line voltage due to power cutbacks or line loss; the increase of power line transients from lightning or the switching of power or equipment; and the increased speed of achieving consistent, reliable, clean power is becoming more critical every day. Input Voltage: (Nominal) 108/230, 3ϕ; Range: +10/-20. Output Voltage: (Nominal) 208/230 volts, Regulation: ±1% for any combination of line, load, thermal drift, warm up time and frequency. Capable of remote sensing. Frequency: 57 to 63Hz. Output Voltage Adjustability: Continuously adjustable from 208 to 230 volts. Transient Response Time: Starts immediately. Complete within 4,752 cycles. Power Efficiency: 95% typical (watts). Load Power Factor: With little derating -.75 lagging to .95 leading. Without derating -.95 lagging to unity. VA Efficiency 85% typical. Regulation: (line) ±1/4%; Maximum Harmonics: Balanced line and load; 35% maximum; Unbalanced line and/or load 6% maximum.

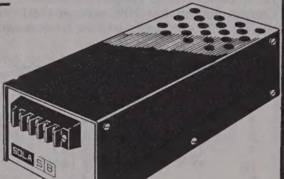


Cat. No.	Output KVA	Shpg. Lbs.	Dimensions H"	W"	D"	Net Ea.
107-39-59-310	10	540	50	27	20	$2866.00
107-39-59-315	15	700	50	27	20	3209.00
107-39-59-325	25	1,080	65	36	27	3534.00
107-39-59-350	50	1,510	65	36	27	5643.00
107-39-59-375	75	1,785	65	36	27	8387.00
107-39-59-410*	100	1,200	65	36	27	10648.00
107-39-59-415*	150	1,385	65	36	27	15457.00
107-39-59-422*	225	1,585	65	36	27	21354.00

*Consists of 3 cabinets, specs are the same for each.

SOLA MODULAR POWER SUPPLIES

REGULATED FIXED D-C OUTPUT



Static-magnetic devices with a fixed regulated d-c output. The power supply consists of a constant voltage transformer, a rectifier and a filter circuit. Output voltages are held to ±1% or less for input variations as great as ±15% of the nominal input voltage. Response time 50 milliseconds. Isolation between the primary and secondary of the CV transformer permits grounding either polarity of the d-c output, operating units with outputs in parallel for greater current output, in series for greater voltage, or with primaries in 3-phase why or delta circuits and the outputs in parallel.

INPUT 100 TO 130 V-AC, 60 HZ.

Cat. No.	D-C Output V.	A.	VA	Load Reg. V†	V‡	Shpg. Lbs.	Max. Rip.#
107-28-04-315	4.0	15.0	60	0.5	0.8	14	0.4
107-28-05-315	5.2	15.0	78	0.5	0.8	14	0.4
107-28-06-315	6.3	15.0	95	0.5	0.8	14	0.4
107-28-10-312	10.0	12.0	120	0.6	1.0	14	0.4
107-28-12-310	12.0	10.0	120	0.6	1.0	14	0.4
107-28-15-280	15.0	8.0	120	0.8	1.3	14	0.3
107-28-18-267	18.0	6.7	120	0.8	1.3	14	0.3
107-28-24-250	24.0	5.0	120	1.0	1.7	14	0.3
107-28-28-243	28.0	4.3	120	1.2	2.0	14	0.3
107-28-48-225	48.0	2.5	120	2.0	3.4	14	0.4

Units above measure 13" x 5.25" x 3.5" high.

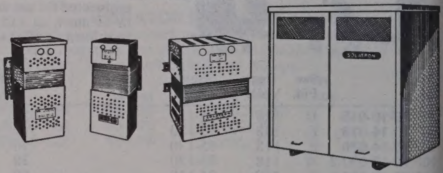
Net Each 1 to 4 $109.00, 5 to 9 $98.00, 10 to 24 $87.00

Cat. No.	D-C Output V.	A.	VA	Load Reg. V†	V‡	Shpg. Lbs.	Max. Rip.#
107-28-04-325	4.0	25.0	100	0.5	0.8	19	0.4
107-28-05-325	5.2	25.0	130	0.5	0.8	19	0.4
107-28-06-325	6.3	25.0	155	0.5	0.8	19	0.4
107-28-10-318	10.0	18.0	180	0.6	1.0	19	0.4
107-28-12-315	12.0	15.0	180	0.6	1.0	19	0.4
107-28-15-312	15.0	12.0	180	0.6	1.0	19	0.3
107-28-18-310	18.0	10.0	180	0.6	1.0	19	0.3
107-28-24-280	24.0	8.0	192	0.7	1.2	19	0.3
107-28-28-270	28.0	7.0	196	0.7	1.2	19	0.3
107-28-48-240	48.0	4.0	196	1.0	1.7	19	0.3

Units above measure 9.75" x 4.94" x 6.9" high.

Net Each 1 to 4 $129.00, 5 to 9 $116.00, 10 to 24 $103.00.

Under load regulation V† is 0.5 to full load; V‡ is 0.25 to full load.
#Maximum ripple volts rms.



SOLATRON ±1/2% LINE VOLTAGE REGULATORS

Regulation: ±0.5% for line changes. ±1% max. for any combination of line, load, temperature and freq. Variation Limits: line ±10% for units above 25KVA, +10%/20% for all others. Freq. 57-63 Hz. Response: 100% complete correction in less than 10 cycles. Adjustable output: ±10% of normal output voltage. Max Harmonic Content: 5% for units up to 25KVA, 9% for all others.

Cat. 107-*	Output KVA	Output Voltage	See Fig.	Dimensions in Inches H	W	D	Net Ea.
33-16-150	.5	120	A	13.875	6.125	6.125	$364.00
33-16-210	1	120	A	16.375	6.125	6.125	400.00
33-26-210	1	240	A	16.375	6.125	6.125	400.00
33-16-220-6	2	120	B	18.625	8.578	9.187	538.00
33-26-220-6	2	208*	B	18.625	8.578	9.187	538.00
33-16-230-6	3	120	B	19.500	8.578	9.187	618.00
33-26-230-6	3	208*	B	19.500	8.578	9.187	618.00
33-16-250-6	5	120	B	21.375	8.578	9.187	799.00
33-26-250-6	5	208*	B	21.375	8.578	9.187	799.00
33-16-275-6	7.5	120	B	23.750	8.578	9.187	968.00
33-26-275-6	7.5	208*	B	23.750	8.578	9.187	968.00
33-16-310-6	10	120	B	23.750	8.578	9.187	1079.00
33-26-310-6	10	208*	B	23.750	8.578	9.187	1079.00
33-16-315	15	120	C	23.625	15.500	12.937	1164.00
33-06-315	15	208	C	23.625	15.500	12.937	1164.00
33-16-325	25	120	C	31.625	15.500	12.937	1550.00
33-06-325	25	208	C	31.625	15.500	12.937	1550.00
31-16-337	37.5	120	C	24.375	15.500	12.937	1880.00
31-26-337	37.5	240	C	24.375	15.500	12.937	1880.00
31-16-350-5	50	120	E	42.000	34.000	28.000	2231.00
31-26-350-5	50	240	E	42.000	34.000	28.000	2231.00
31-16-375-5	75	120	E	55.000	37.000	34.000	2793.00
31-26-375-5	75	240	E	55.000	37.000	34.000	2793.00
31-16-410-5	100	120	E	55.000	37.000	34.000	3346.00
31-26-410-5	100	240	E	55.000	37.000	34.000	3346.00
31-16-415-5	150	120	E	65.000	42.000	38.000	4007.00
31-26-415-5	150	240	E	65.000	42.000	38.000	4007.00

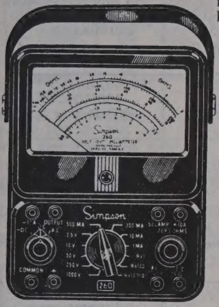
⋆Include complete Cat. No. when ordering i.e. 107-281513-2.
*Also 240 V.

SIMPSON 260® FAMILY

TAUT-BAND AC/DC V-O-MA METERS

AMP-CLAMP

A model for every service application. 4.2" long multi-colored scales. 50 microampere Taut Band meter movement, varister protected to even 200,000% overloads. A 1-ampere replaceable fuse guards the input circuits. Model 260-6P has additional protection of overload relay with pop-out reset button. Case is molded phenolic, 5.25" x 7" x 3.125" in size, with external access battery and fuse compartment. Complete specifications, ranges, etc., are given in the table below. Each model is furnished complete with operator's manual, test leads, fuses, and batteries. Net weight 3.5 lbs. each.


Model 260-5

Cat.	Description	Net
29-260-6	Standard V-O-Ma, with varister and fuse protection.	**$68.50**
29-260-6RT	Same, in rugged, Roll-Top Protective Case.	**74.50**
29-260-6M	V-O-Ma, with varister and fuse protection, mirror scale and knife-edge pointer.	**71.50**
29-260-6MRT	Same, in rugged, Roll-Top Protective Case.	**76.50**
29-260-6P	V-O-Ma, with varister, fuse and overload relay protection	**99.50**
29-260-6PRT	Same, in rugged, Roll-Top Protective Case.	**105.50**
29-250	V-O-Ma especially for solid state servicing.	**73.50**
29-255	Utility model for gas appliance, electrical heating and appliance servicing.	**90.00**
261-2	High accuracy V-O-Ma. Has mirror scale and knife-edge pointer.	**76.50**
29-261-RT	Same, in rugged, Roll-Top Protective Case.	**82.50**
29-270-4	High accuracy V-O-Ma. Has mirror scale, knife-edge pointer temp. compensation.	**81.50**
29-270-RT	Same, in rugged, Roll-Top Protective Case.	**87.50**
29-00805	Ever-Redi Vinyl Carrying Case for 260-6, 260-6M, 260-6P, 250, 261-2, 270-3.	**15.50**
29-00506	5 KV-DC accessory Slip-On Safety Probe for 260-6, 260-6M, 260-6P,261-2,270-3	**4.50**
29-00505	5 KV-AC accessory Slip On Safety Probe for 260-6, 260-6M, 260-6P,261-2,270-3	**4.50**
29-00532	Accessory Amp-Clamp A-C Current Adapter for 260 Series V-O-Ma's.	**30.00**

MODEL 150 AMP-CLAMP ADAPTER FOR AC AMPERE MEASUREMENTS

Clamp-on AC ammeter adapter allows measurement or be made without breaking circuit being tested. Simply plugs into 160, 260®, 261, 270, or 255 VOM. Ranges: 0-5, 10, 25, 50, 100, 250 AC Amperes. Readout is on VOMs 0-2.5 VAC scale. May be used with any VOM having 0-2.5 VAC scale. 0-300 AC Amperes. Rugged construction, and easy to use.

Cat. 29-00532	Amp-Clamp with 00533 test lead	**Ea. $30.00**	**Cat. 29-00548**	Carrying case	**Ea. $8.00**
Cat. 29-0533	Test lead	**2.25**	**Cat. 29-02056**	Adapter pins (160 only)	**1.55**

VOLT-OHM-MILLIAMMETER SPECIFICATIONS. 20,000 Ω/V-DC; 5,000 Ω/V-AC

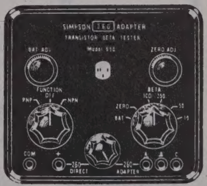
Ranges	M ODEL 29-250	MODEL 29-255	MODEL 29-260-6	MODEL 29-260-6M	MODEL 29-260-6P	MODEL 29-261-2	MODEL 29-270-4
-C Volts	0-.05/.25/2.5/10/ 50/250/500/1000	0-.05/.25/1/2.5/ 10/50/250/1000	0-.25/1/2.5/10/50/250/500/1000 0-5000 with accessory 00506 Safety Probe				
-C Volts	0-2.5/10/50/ 250/500/1000	0-2.5/10/50/ 250/1000	0-2.5/10/50/250/500/1000 0-5000 with accessory 00505 Safety Probe				
-C Microamperes	0-50 (Both 50 & 250 mV drop)		0-50 (250 mV drop)				
-C Milliamperes	0-1/10/100/500 (50 mV drop)		0-1/10/100/500				
-C Amperes	0-10 (50 mV drop)	None	0-10 (250 mV drop)				
-C Amperes	Up to 250 A-C Amps with Accessory.00532 Amp-Clamp Adapter						
B (1 mW 600Ω)	-20 to +50. 4 Ranges	None	-20 to +50 DB in 4 ranges				
utput Ranges	None	None	0.1 mfd. in series with all A-C ranges thru 250 volts				
esistance Ranges	**R x 1** 0-2000Ω (12Ω center) **R x 1** 0-200KΩ (1200Ω center) **R x 10K** 0-20 megΩ (120KΩ center)						
emperature Ranges	None	+100°F to +1050°F	None				
ccuracies							
-50 mV; 0-250 mV; -2.5 to 0-1000 V-DC	±2.0% F.S.	±2.0% F.S.	±2.0% F.S.			±1.5% F.S.	±1.25% F.S.
-5000 V-DC	-------	-------	±2.0% F.S.			±2.5% F.S.	±2.25% F.S.
-50 Microamperes	±1.0% F.S.	±1.0% F.S.	±1.5% F.S.			±1.0% F.S.	±0.75% F.S.
-1 mA to 0-10 A-DC	±2.0% F.S.	±2.0% F.S.	±2.0% F.S.			±1.5% F.S.	±1.25% F.S.
x 1	±2.5° of Arc	±2.5° of Arc	±2.5° of Arc			±2.0° of Arc	±1.5° of Arc
x 100; R x 10K	±2.0° of Arc	±2.0° of Arc	±2.0° of Arc			±1.5° of Arc	±1.0° of Arc
-2.5 to 0-1000 V-AC	±3.0% F.S.	±3.0% F.S.	±3.0% F.S.			±3.0% F.S.	±2.0% F.S.
-5000 Volts	-------	-------	±4.0% F.S.			±4.0% F.S.	±3.0% F.S.
ovement Type	TAUT BAND Self-Shielding Annular						
emp. Compensated	No	No	No	No	No	No	Yes
ovement Protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes
verload Protection	No†	No†	No†	No†	Yes‡	No†	No†
irror Scale	No	No	No	Yes	No	Yes	Yes

1 amp. fuse limits maximum current. ‡ 1 amp fuse plus overload button which pops out, cannot be reset while overload is present.

ADD-A TESTER ADAPTERS FOR 260 GROUP VOLT-OHM-MA METERS

xpands the use of the 260 Family of V-O-M's to include other functions as listed below. Adapters plug into the bottom of the V-O-M nd need not be disconnected for normal V-O-M use. Accuracies: #for 260; with 261 or 270 *1% better; †4° 220° to 250°; ‡±7%; ±1.5%.

at.	Model	Net	Ranges	Accuracy #
9-650	Transistor Tester	**$44.00**	BETA; 0-10/50/250 Ico; 0-100 uA.	BETA; ±5%* Ico; ±3% F.S.*
9-651	DC VT-VM	**52.00**	0-.5/1/2.5/10/25/50/100/250/500@11 meg	±3% F.S.*
9-652	Temperature Tester	**49.00**	-50°F to 100°F, 100°F to 250°F.	±2°F. -30° to+220°F.†
9-653	A-C Ammeter	**30.00**	0-.25/1/2.5/12.5/25 Amps A-C	
9-654	Audio Wattmeter	**34.00**	0-25 watts @ 8/600Ω, 0-50 watts @ 4/16Ω	±10% F.S.‡
9-655	Microvolt Atten.	**30.00**	2.5 uV to 250,000 uV in decade steps	±1 DB
9-656	Battery Tester	**30.00**	From 0 to 90 volts under load conditions	±4% F.S.*
9-657	Milli-Ohmmeter	**54.00**	0-.1/.25/.5/1.0 ohms	±2% F.S.§
9-661	D-C Ammeter	**33.00**	0-1/2.5/5/10/25 Amperes D-C	±2% F.S.§



650 ADAPTER

SIMPSON SERVICE INSTRUMENTS

7-INCH
AC/DC V-O-M'S

Rugged, dependable instruments which are ideal for Radio and Television servicing, and for use in research laboratories, schools, and colleges. The 6.2" long wide-vue meter scales make possible accurate repetitive readings. Meter movements are self-shielded and have built-in protection against overload or burn-out. Taut band movements provide protection against mechanical shock. All ranges and functions are selected by one switch. Molded, high impact resistant phenolic cases are 6" x 3" x 7¼" in size. Model 269-3 is furnished with test leads and 4000 volt DC probe extension. Others are furnished with test leads.

7-INCH VOLT-OHM-MILLIAMMETERS

Ranges	Model 29-262-3 **$87.50**	Model 29-263 **$99.50**	Model 29-269-3 **$99.50**
DC Volts	0-1.6/8/40/160/400/ 1600/4000 @20KΩ/V	0-.15/.75/3/7.5/30/75/ 300/750/3000@20KΩ/V 0-.3/1.5/6/15/60/150/ 600/1500/6000@10KΩ/V	0-1.6/8/40/160/400/ 800/1600/4000 @100KΩ/V
AC Volts	0-3/8/40/160/800/ @5KΩ/V	0-2.5/7.5/30/150/750/ @10KΩ/V 0-5/15/60/300/1500 @5KΩ/V	0-3/8/40/160/ 400/800 @5KΩ/V
DC Microamperes	0-80/160	0-75 @ 150 MV 0-150 @ 300 MV	0-16/160
DC Milliamperes	0-1.6/16/160	0-.75/7.5/75/750 @ 150 MV 0-1.5/15/150 @ 300 MV	0-1.6/16/160
DC Amperes	0-1.6/8	0-7.5 @ 150 MV. 0-1.5/15 @ 300 MV	0-1.6/8
DB Scale (1 MW 600Ω)	-12 to +45.5 db in 4 ranges	-20 to +75.5 db in 10 ranges	-12 to +45.5 db in 4 ranges
Output Ranges	0.1 mfd. ser. cap. AC-V thru 160 V.	0.1 mfd. ser. cap. AC-V thru 300 V.	0.1 mfd. ser. cap. AC-V thru 160 V.
Resistance Ranges	0-500Ω/5KΩ/50KΩ/500KΩ 0-5 megΩ/50 megΩ		0-200Ω/20KΩ/200KΩ 0-2/20/200 megΩ
Accuracies			
DC Volts	± 2%	0-0.15 to 1500 ± 1.5% 0-3000 to 6000 ± 2.5%	0-1.6 to 1600 ± 1.5% 0-4000 ± 3.5%
AC Volts	± 3%	± 3%	0-3 to 800 ± 2.5%
DC Current	± 2%	± 1.5%	All ranges ± 1.5%
R x 1	± 3° of Arc	± 3° of Arc	± 2° of Arc
R x 10,R x 100K	± 2.5° of Arc	± 2.5° of Arc	± 2° of Arc

160 HANDI-VOM
TAUT-BAND METER

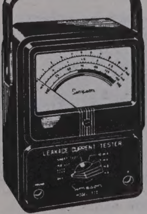
Self-shielded, burn-out protected, taut-band meter with 3" scales. Reads DC-V to 1000 in 8 ranges @ 20K ohms/v., AC-V to 1000 in 6 ranges @ 5K ohms/v., DC-uA to 50, DC-MA to 500 in 4 ranges. Resistance to 10 megohms in 4 ranges. Decibels from -20 to +50 in 4 ranges. Accuracy: DC ± 2%; AC ± 3%. Palm-size case is 4-9/16" x 3-5/16" x 1¾". Wt. 12 oz. Furnished with test leads and manual.

Cat. 29-160 V-O-M **Net $57.50**

355 MIDGETESTER
POCKET AC/DC V-O-M

Only 2¾" x 4½" x 1" in size. Weighs only 8 oz. Incorporates a 100 μamp, self-shielded core meter movement which is not affected by strong stray magnetic fields. Accuracy: DC ± 3%; AC ± 5%; Ohms ± 3°. Measures AC/DC Volts from 0-3/12/60/300/1200 @ 10,000 ohms/volt. Resistance ranges 0-10KΩ, 0-100KΩ, 0-1 MegΩ, and 0-10 MegΩ. Frequency response essentially to 10 kcs. Furnished with test leads and manual.

Cat. 29-355 Midgetester **Net $50.00**



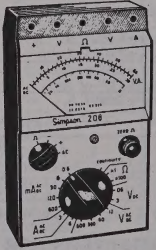
229 A-C LEAKAGE CURRENT TESTER

Measures a-c current to as low as 5 microamperes, and meets U.S. Standards Committee's proposed specifications (C100.1) for a-c current leakage tests. It will test for current above the "threshold of perception" (1.067 ma. at 60 Hz in the average person), and detect shorts and near shorts. Ranges: A-C Current 0-0.3/1/3/10 ma; A-C Voltage 0-150; Battery Test "Replace-Good". Resolution; 5 uA on 0.03 Ma. range. Accuracy ± 2% at 60 Hz. Input impedance 1500 ohms, shunted by a shaping network, on all current ranges. Input resistance 500,000 ohms on voltage range. Overload protected up to 150 volts on all ranges. Furnished complete with test leads, batteries and operator's manual.

Cat. 29-229 Leakage Current Tester **Net $95.00**

Accessories

Cat. 29-05262	Case for Models 262-3, 263, 269-3	**Net $15.50**
Cat. 29-00115	Test leads for Models 262-3,263,269-3	**Net $ 3.75**
Cat. 29-07500	Test leads for Model 229	**Net $ 3.25**
Cat. 29-02055	Probe test leads for Model 160	**Net $ 3.50**
Cat. 29-08600	Probe test leads for Model 355	**Net $ 3.50**
Cat. 29-07538	Probe test leads for Model 208, 209	**Net $ 3.75**
Cat. 29-02225	Carrying case for Model 160	**Net $11.00**
Cat. 29-06355	Carrying case for Model 355	**Net $ 6.00**
Cat. 29-00578	Carrying case for Model 208, 209	**Net $11.00**



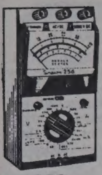
MODEL 209
AC-DC VOM'S
ILLUMINATED METER SCALES

With built-in A-C current ranges. Separate inputs for voltage and current allow easy combined measurements using two sets of leads. All you need do to read current or voltage is flip the range switch. Both models feature shock proof self-shielding movements. Illuminated 3.75" long meter scales, plus "light-up" continuity checker. Molded, High-impact phenolic cases are 6" x 3-5/8" x 1-11/16". Wt. 18 oz. Furnished with test leads and operator's manual.

Function	MODEL 29-209 **$68.00**
D-C Volts	0-0.06/12/60/300/600 @ 1666 Ω/v.*
A-C Volts	0-12/60/300/600 @ 1666 Ω/v.
D-C Milliamps	0-120/600
D-C Amperes	0-3/12
A-C Milliamps	0-6/30/120/600
A-C Amperes	0-3/12
Resistance	Rx1 (43.9 Ω ctr.) Rx100
Accuracy	±1.5%DC, ±2.5% AC

*Above 60 volts.

SIMPSON TEST EQUIPMENT



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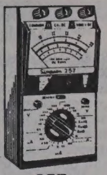


257

MULTI-TESTERS
FOR CURRENT RESISTANCE CAPACITANCE OVERLOAD PROTECTED

Push-button reset overload protection for all ranges except 100 volts and higher, plus a fused input and varistor across the meter movement. *High resistance range requires external 100 to 130 v-dc. **Requires external 100 to 240 v-ac, 60 Hz. Furnished complete with test eads and operator's manual.

Ranges	Model 29-256 $150.00	Model 29-257 $95.00
D-C Volts	0-0.1 to 0-5000, 10 ranges @ 25K Ω/V.	0-0.1 to 0-5000, 9 ranges @ 100K Ω/V.
A-C Volts	0-0.5 to 0-5000, 9 ranges @ 2K Ω/V.	0-10 to 0-1000, 4 ranges @ 20K Ω/V.
D-C Microamps	0-100	0-10/50/250
D-C Milliamps	0-0.5/2.5/10/50	0-1/5/25/100
D-C Amperes	0-0.25/1/5	0-1
A-C Milliamps	0-0.5/2.5/10/50	None
A-C Amperes	0-0.25/10/50	None
Decibels	-34 to +56 db in 7 ranges	-8 to +50 db in 3 ranges
D-C Resistance	Rx1/1K/10K/1 Meg* (30 Ω ctr.)	Rx1/1K/100K 10Meg* (30 Ω ctr.)
A-C Resistance	Rx1 Meg** (1 Meg Ω ctr.)	Rx1 Meg** (1 Meg Ω ctr.)
Capacitance	100 pF to 20K pF**	2K pF to 5 μF**
Accuracy	±1% DC; ±1.5% AC	±1.5% DC: ±2,5% AC
Output	0.1 μF capacitor in series 10 thru 250 v-ac	
Meter	Self shielding TAUT BAND movement	

DIGITAL INSTRUMENTS

Reliable miniature instruments for use on equipment panels. Non-blinking readouts, with storage circuitry to hold the number assure fast and clear readings. Solid state circuitry (except for readout tubes) is used throughout for reliability. Accuracy ±0.1% (F.S.), ±1 digit. Resolution 1 part in 1000. Sample rate 5 readings per second, continous. Readout digits are cold-gas glow tubes, 200,000 hour rated life. Number "1" automatically lights to left of other digits to indicate overrange. When measured value exceeds overrange capacity the "1" flashes, preventing erroneous readouts. Reverse polarity is automatically indicated by a light to the right of the other digits. Linear 15% underrange permits reading negative values. Common mode rejection greater than 35 db at 60 Hz. Ambient temperature range to maintain rated accuracy +15°C to +35°C. Operating power 9 VA at 117 v-ac. Panel bezel is 4.87" wide x 3.00" high, with attractive matte finish and tinted window. †With overrange. *Overrange limited to 10% on this unit. ‡Ohms

D-C VOLTAGE RANGES

Cat. No.	D-C Voltage Range	Max. Indication†	Input Imp.‡	Net Each
29-22950	00.0 to 99.9 mV.	199.9 mV.	10 K	$210.00
29-22951	.000 to .999 V.	1.999 V.	100K	
29-22952	0.00 to 9.99 V.	19.99 V.	1 Meg.	
29-22953	00.0 to 99.9 V.	199.9 V.	1 Meg.	
29-22954	000. to 999. V.	1010.V.*	1 Meg.	

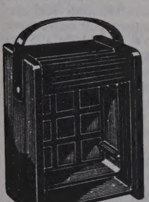
D-C CURRENT RANGES

Cat. No.	D-C Current Range	Max. Indication†	Volt Drop	Net Each
29-22955	0.00 to 9.99 uA.	19.99 uA.	50 mV.	$210.00
29-22956	00.0 to 99.9 uA.	199.9 uA.	50 mV.	
29-22957	.000 to .999 mA.	1.999 mA.	50 mV	
29-22958	0.00 to 9.99 mA.	19.99 mA.	50 mV.	
29-22959	00.0 to 99.9 mA.	199.9 mA.	50 mV.	

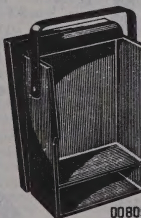
REPLACEMENT TEST LEADS

Cat.	For V-O-M Models	Net Pair
29-02055	160 Probe tip leads	$3.00
29-01927	160 Alligator clip leads	2.50
29-07500	202,208, 209 Alligator clip leads	2.75
29-07538	202, 208, 209 Probe tip leads	3.25
29-07500	250, 255 Alligator clip leads	2.75
29-07538	250, 255 Probe tip leads	3.25
29-08375	260 (Series 1, 2 only) Alligator clip leads	2.75
29-08381	260 (Series 1, 2 only) Probe tip leads	3.25
29-07500	260 (Series 3, 4, 6 only) 261, 262 (Series 3 only) , Alligator clip leads	2.75
29-07538	260 (Series 3, 4, 6 only), 261, 262 (Series 3 only) Probe tip leads	3.25

Cat.	For V-O-M Models	Net Pair
29-07538	260-6, 260-6TR, 260-M, 260-6MRT, 260-6P, 260-6PRT, Probe tip leads	$3.75
29-07500	260-6, 260-6RT, 260-M, 260-6MRT, 260-6P, 260-6PRT, Alligator clip leads	3.25
29-07500	263, 267, 268, 269 (Series 2, 3 only), Alligator clip leads	3.25
29-07538	263, 267, 268, 269 (Series 2, 3 only), Probe tip leads	3.75
29-07500	270 Alligator clip leads	3.25
29-07538	270 Probe tip leads	3.75
29-08600	355 Probe tip leads	3.50
29-08376	387 Alligator clip leads	3.25
29-08379	387 Probe tip leads	3.75



Roll Top

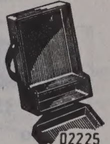


00805

SIMPSON CARRYING CASES
FOR TEST EQUIPMENT

For the protection of portable VOM's, VTM's, etc. The ROLL TOP cases provide maximum protection and safety. The case is solid, and the rigid front slides down to cover the tester front, but can be rolled up for access to the tester. Tester mounts permanently in case, need not be removed when used. Additional space for test leads.

05262



02225

Cat. No.	For Tester Models	Net Ea.
29-00548	150 Amp-Clamp Carrying Case.	$8.00
29-02225	160 HANDI-VOM Carrying Case.	11.00
29-02929	160 HANDI-VOM Case, Vacuum Formed.	11.00
29-00578	208, 209. Leather Carrying Case.	11.00
29-00549	250, 255, 260, 261, 270. Utility Case*.	20.00
29-00574	HV Probe Case. Snaps On 00549 Above.	6.00
29-01818	229, 250, 260, 261, 270. Leather Case.	13.50
29-00805	229, 250, 260, 261, 270, 303. Vinyl Case.	15.50
29-01871	260 with Adapter. Leather Case.	17.50
29-05262	262, 263, 267, 268, 269, 388-3L, 389-3L. Vinyl.	.15.50.
29-00577	202, 312, 313, Vinyl Case.	17.00
29-08073	385-3L. Leather Carrying Case.	12.00

*Has extra space for accessories and/or tools.

Cat. No. 29-★	For Tester Models	Net Ea.
03413	391, 392. Leatherette Covered.	$12.00
06355	355 MIDGETESTER. Leather Case.	6.00
20196	603. Vinyl Carrying Case.	20.00
04299	All MICROTESTERS (Except 391,392). Leather.	11.00
03011	Same as 04299 but Leatherette Covered.	9.00

ROLL TOP SAFETY CASES

Cat. No. 29-★	For Tester Models	Net Ea.
06192	260-2, 0, 10, 880's.	12.00
00249	260-3, -4, -5, -5P, 261, 270-3	13.00
05379	303.	13.00
00248	260-6, -6P, 270-4	13.00

SPONGE LINED CASES

Cat. No. 29-★	For Tester Models	Net Ea.
01565	202, 312, 313. Vinyl Carrying Case.	17.00
01613	262, 263, 269. Vinyl Carrying Case.	14.00

★Be sure to include entire Cat. No. when ordering.

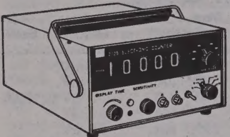
SIMPSON INSTRUMENTATION PRODUCTS

DIGITAL SYSTEM 2700

.0001 TO 999.9 VOLTS D-C

Four basic ranges of 0-1, 0-10, 0-100, and 0-1000 v-dc. Accuracy ± 0.5%, ± 1 digit. Fully automatic polarity selection, with indication. Four full-time digits, plus 10% linear overrange. Fast, up to 5 new readings per second. Input floating, up to 500 v-dc. Circuitry is solid state and integrated circuits. Readout is by cold gas glow tubes, 200,000 hour rated life. Push-button front panel calibration check. Noise rejection, common mode (with 1 kΩ unbalance in either lead): DC, 120 db; AC 90 db (60 Hz). Normal mode; AC 60 db (60 Hz). Overall size 4" x 8.25" x 11". Wt. 8 lbs. Power required 115/230 v-ac, ± 10%, 50-60 Hz at 15 watts. Furnished complete with D-C Voltage range module, test leads and operator's manual. Accessory plug-in modules are available for resistance and D-C Current measurements.

Cat. 29-22700	Model 2700 System	**Net $615.00**
Cat. 29-22901	Accessory plug-in module for 0-1 kΩ, 10 kΩ, 100 kΩ, 10 MegΩ	**Net $100.00**
Cat. 29-22903	Accessory plug-in module for 0-1 mA, 10 mA, 100 mA, 1 Amp.	**Net $100.00**
Cat. 29-22902	Accessory plug-in module for 0-1, 10, 100, 1000 V rms AC	**Net $150.00**
Cat. 29-07511	Replacement leads for 2700	**Net $3.75**

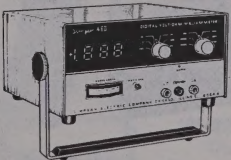


DIGITAL COUNTER 2725

DIRECT READOUTS UP TO 20 MHz

New I/C digital counters to measure average frequency 5Hz to 32MHz, time interval, period, and frequency ratio, plus totalizing pulses over a selected time period. Front panel switch provides through check of logic circuitry. 6 time bases are switch controlled. The interval clock is crystal controlled for accuracy. Over-range and Gate time indications are fully automatic. Accuracy ±1 digit. Frequency range 5 Hz to 32 MHz. Period 100 micro-sec to 0.2 sec. Frequency ratio 1 to 1.99999 x 10^5. Time interval 100 micro-sec to 1.99999 x 10^5. Totalization 0 to 1.99999 x 10^5 counts. Input impedance: Channel A 1 megΩ shunted by 30 pf, channel B 600kΩ shunted by 30 pf. Input sensitivity: Channel A 0.1 v-rms, channel B 0.1 v-rms from 200 Hz to 2 MHz, 0.3 v-rms from 5 Hz to 200 Hz. Solid state and integrated circuitry throughout. Readouts by cold gas glow tubes, 200,000 hour rated life. Overall size 4" x 8.25" x 11". Wt. 8 lbs. Power required 115/230 v-ac, ±10%, 50-60 Hz, at approx. 20VA. Complete with probe and operator's manual.

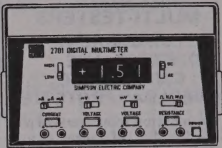
Cat. 29-22725	Model 2725 Counter	**Net $475.00**
Cat. 29-00238	Replacement Test Probe	**Net $7.85**
Cat. 29-22915	Rack mounting kit complete with standard 5¼" x 19" panel	**Net $20.00**
Cat. 29-22925	Dual rack mounting kit (mounts 2 units side by side) 5¼" x 19" panel	**Net $25.00**



MODEL 460 PORTABLE DIGITAL VOM

Combines high accuracy, multiple range testing with non-blinking 3½ digit display and front panel analog meter readout. Operates on rechargable, self-contained batteries or 105-125 v-ac, 50/60/400 Hz. Power consumption 10 VA. Ranges: DC Volts: 0-200 mV; 0-2-20-200-1000 V. with ±0.1% reading accuracy, ±1 digit; input impedance, 10 megs except 200 mV, 100 megs and 2 V, 1000 megs. AC Volts: 0-200 mV; 0-2-20-200-1000 V. with ±0.5% reading accuracy, ±1 digit, input impedance, 1 megohm, frequency range, 40 Hz to 10 kHz. (±1% accuracy for 10 kHz to 20 kHz). DC Current: 0-200 uA; 0-2-20-200 mA (±0.2% reading accuracy, ±1 digit); 0-1000 mA (±1.0% accuracy); voltage drop, 0.2 V. Resistance: 0-200-2K-20K-200K-1000K ohms (±0.5% reading accuracy, ±1 digit); 0-20 megohms (±1% accuracy). Common mode rejection: 80 dB min. at 60 Hz with 1K ohms unbalance. Normal Mode Rejection: 35 dB min. at 60 Hz. Numeric Display: 5 per second. Battery operation uses four Ni-Cad "D" cells. 15 VA normal when battery charging with unit on. Overall size 8.5" wide, 7.875" deep, 4.015" high.

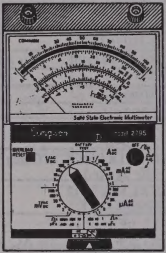
Cat. 29-460	Portable Digital VOM	**Net $395.00**
Cat. 29-00159	High Voltage probe, 30KV, DC	**Net $25.00**
Cat. 29-01614	Vinyl Carrying Case	**Net $19.50**



DIGITAL V-O-M MODEL 2701

Solid state circuitry throughout. Readings appear on cold gas glow tubes as a three-digit number, complete with polarity sign and decimal point. Decimal point automatically switches over three decade ranges. Model 2701 reads DC/AC Volts from 0.01 millivolts to 600 volts in 6 ranges. Maximum input impedance 5 MegΩ. Reads DC/AC Current in 9 ranges from 100 nano-amps to 999 milliamps. DC/AC accuracy ± 0.2% F.S. Reads resistances from 0 ohms to 999 megΩ in 9 ranges. Test current less than 1.4 milliamps. Response time: without filter 1 sec.; with filter 4 sec. Overall size 5.5" x 10" x 10". Wt. 14.3 lbs. Power required 105-130 v-ac, 60 Hz, 60 watts. Furnished complete with test leads and operator's manual.

Cat. 29-22701	Model 2701 V-O-Meter	**Net $835.00**
Cat. 29-06531	Accessory 100 Amp D-C Shunt	**Net $15.00**

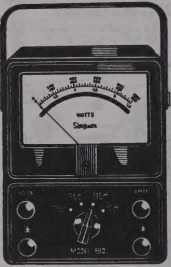


2795 ELECTRONIC MULTIMETER

68 RANGES

Solid state circuitry, battery operated and self-contained. Features high input impedance, negligible voltage drop, circuit breaker overload protection, surge limiter to bypass voltage peaks, varistors to protect electronic amplifier and meter movement, and ± 1% accuracy for both AC and DC. Overload relay cannot be reset until overload is cleared. Taut-band meter movement has 4.33" long scale. Model 2795 measures AC/DC Volts in 13 ranges from 0-1 mV to 0-1000 V., AC/DC Current in 14 ranges from 0-1 uA to 0-3A., Resistance in 6 ranges from 0-500 ohms to 0-50 megΩ, Capacitance from 0.05 uF to 0-2000 uF, and from 0.05 nF to 5 uF, and Temperatures to ± 18°C and ± 180°C from ambient. An electronic chopper provides the AC needed for capacitance measurements. Overall size (HWD) 8.07" x 5.04" x 3.94". Wt. 52.8 oz. Furnished complete with batteries, test leads, and instruction.

Cat. 29-22795	Model 2795 Multimeter	**Net $250.00**
Cat. 29-00115	Replacement Test Leads	**Net $3.75**
Cat. 29-22927	Leather Carrying Case	**Net $21.50**
Cat. 29-06531	Clamp-on 1/3/10/30/100 DC-A Shunt	**Net $19.50**
Cat. 29-02462	Clamp-on 10/30/100/300/600 AC-A Current Transformer, 45-65 Hz	**Net $54.55**
Cat. 29-22926	30 KV-DC High Voltage Probe	**Net $41.25**
Cat. 29-22923	Thermocouple Probe (Surface)	**Net $28.50**
Cat. 29-22924	Thermocouple Probe (Immersion)	**Net $28.50**
Cat. 29-22929	High Frequency Probe	**Net $75.00**



AC/DC WATTMETER

SINGLE PHASE

A secondary standard for laboratory production line, incoming, inspection, quality control and field engineering. Dynamometer movement for DC and low frequency (25 to 250 Hz) AC. Separate binding posts for voltage and current. Selector switch for ranges. Reads 0-500/1000 watts at 150 v., 0-1000/2000 watts at 300 v., and 0-7.5/15 amps. Overall size 5.25" x 3.5" x 7". Wt. 2.5 lbs.

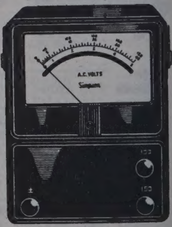
Cat.	Model	
29-13240	880	**Net $107.50**

MODEL 10

A-C VOLTMETER

A secondary standard for uses similar to those for the Model 880 above. Has an iron vane movement with a 3.63" long, 90° meter scale. Accuracy 1% of full scale. Has binding posts for 0-150/300/600 volts A-C. Overall size 5.25" x 3.5" x 7". Approx. wt. 2.5 lbs.

Cat.	Model	
29-13120	10	**Net $80.00**

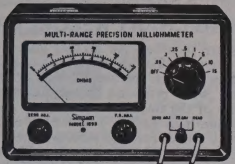


ROLL-TOP CASE

For use with Models 10 and 880. Provides protection for instrument, and instrument may be used without removing it from the case.

Cat. 29-6192	Roll-Top Safety Case	**Net $11.00**

SIMPSON INSTRUMENTATION PRODUCTS



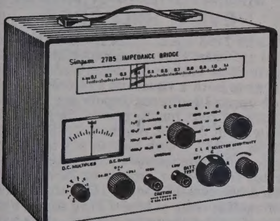
PRECISION MILLIOHMMETER

.05 TO 50 OHMS

For use where extremely accurate low-resistance measurements are required. Completely self-powered and portable. Uses 1 Neda #11, and 1 Neda #1604 batteries, and a matched pair of 2N2716 transistors. 8 ranges for from 0.05 to 50.0 ohms. 7" analog meter with 90° dial can be read out to 0.001 ohms. Accuracy ± 1% of full scale on all ranges, unaffected by contact or lead resistance. Low current of less than 7.95 milliwatts through sample. The Model 1699 determines the value of an unknown resistance by comparing it with a known standard internal resistance. Contact and lead errors are avoided by using test leads terminating in Kelvin Clips coupled with a unique circuit which has separate current and voltage paths. Overall size 11.375" x 7.375" x 3.25". Wt. 5 lbs., 10 oz. Furnished complete with wire-in Kelvin-type clip leads, batteries and instruction manual.

Cat. 29-13299	Model 1699 Precision Ohmmeter	**$195.00**
Cat. 29-0156	Spare Kelvin Test Leads	**Net $5.50**
Cat. 29-09808	Ever-Redy Carrying Case	**Net $37.00**

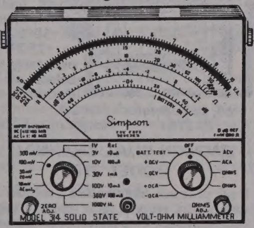
2785 R-C-L BRIDGE



A precision, multi-purpose bridge for use in measuring capacitance, inductance, resistance and "Q". Powered by two long-life 9-volt batteries, a built-in generator provides all voltages needed for the 2785's wide range of measurements. The generator operates at a standard test frequency of 1 kHz. For testing components at other frequencies an external jack is provided. Permissable external frequency input 50 Hz to 20 kHz. DC is used for all resistance measurements, with the voltage directly from the batteries, or rectified from the generator for those ranges requiring higher voltages. The slide-rule dial and sensitive galvanometer make the 2785 simple and fast to use. It measures resistances from 0-1 ohm to 0-10 megohms in 8 ranges. Accuracy ±2.5% on 0-1 ohm and 0-10 megohm ranges, ±1.0% on all other ranges. It measures inductances from 0-10 microhenries to 0-100 henries in 8 ranges. Accuracy ±2.5% on 0-10 microhenries and 0-100 henries, ±1.0% on all other ranges. Capacitance is measured in 8 ranges from 0-100 picofarads to 0-1000 microfarads. Accuracy ±2.5% on 0-1000 microfardad range, ±1.0% on all others. Tan-D and Q measurement ranges: Q x 1; tan d x 0.01; tan d x 1. Accuracy ±5%. Power requirements two NEDA #1603 (9 volt) batteries. Rated life 150 hours. Overall size 11.812" x 8.625" x 6.686". Wt. 12 lbs. Complete with batteries, leads and instructions.

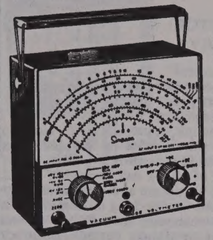
Cat. 29-22785	Model 2785 R-C-L Bridge	**Net $425.00**

NEW MODEL 314 FET VOM



Engineered to meet the requirements for servicing present day electronic equipment without activating or damaging ICs. Measures DC/AC Volts from 0-0.05 to 0-1000 in 10 ranges. Input impedance 10 megohms, (with probe multiplier on x10: 100 megohms). Accuracy FS: ±2% Dc; ±3% AC. DC/AC Current from 0-0.01 to 0-1000 mA-dc in 6 ranges. Input impedance 10K ohms on 10 μA range. Frequency range (ac) 30 Hz to 100 kHz. Resistance ranges 0-1000 ohms, with multipliers of Rx1, Rx10, Rx100, Rx1k, Rx100k and Rx1 Megohm. Center scale indication 10 ohms on Rx1. Maximum test current on low power ohms 5 mA on Rx2. Maximum test current on low power ohms 5 mA on Rx1. Maximum test current on conventional power 165 mA on Rx1. Reads decibels from -60 dB to +62 dB in 11 ranges. Operates from one 1.5 v "D" cell, two 1.5v "AA" cells, and one 9 v PM-6 Burgess (or equivalent) batteries. Overall size 4.625" x 6.75" x 7.75". Weight 5.25 lbs. Furnished complete with batteries, AC/DC-Ohms probe, and instruction manual.

Cat. 29-314	Battery operated FET VOM	**Net $195.00**
Cat. 29-00577	Vinyl Carrying Case	**Net $17.00**
Cat. 29-01565	Sponge Lined Carrying Case	**Net $17.00**
Cat. 29-00193	10 kHz to 250 mHz RF Probe	**Net $11.75**



312 AC/DC VTVM

7" METER SCALE

Specially designed circuit protects meter against burn-out. Low DC Volts ranges meet today's solid state testing requirements. Measures DC Volts from 0-0.5 to 1500 in 8 ranges. Input impedance 16 megΩ. Measures AC-RMS Volts 0-1.5 to 1500 in 7 ranges. Input impedance 1 MegΩ minimum. Measures Peak-Peak Volts 0-4 to 4000 in 7 ranges. Frequency response 15 Hz to 3 MHz on all AC Volts ranges thru 150 volts. RF Volts (with probe) to 40 volts, 10 KHz to 250 MHz. Measures resistances 0-1KΩ to 1000 MegΩ in 7 ranges. Accuracies: DC ±3% F.S.; AC ±3% F.S.; Ohms ±3° of arc. Size 7.75" x 6.75" x 3.75". Net wt. 4.75 lbs. Operates from 105/125 v-ac 50/60 Hz. Furnished with AC/DC/Ohms probe and operator's manual.

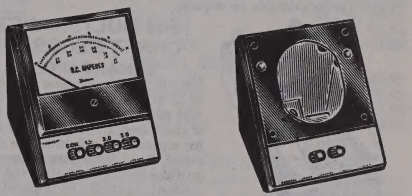
Cat. 29-312	Model 312 AC/DC/Ohms VTVM	**Net $130.00**
Cat. 29-00152	Accessory HF RF Probe	**Net $11.75**
Cat. 29-00155	Accessory 30 KV-DC Probe	**Net $17.00**
Cat. 29-00577	Accessory Vinyl Carrying Case	**Net $17.00**

SOLID STATE 313 VOM

WITH VTVM FEATURES

Similar in appearance and size to Model 312 listed above. Operates continuously for over 300 hours on easily obtained inexpensive batteries. Has battery check and "power on" indicator. The 7", self-shielded, taut-band meter is shock-proof and overload protected. All voltage range inputs fully protected. Input impedances: DC-Volts 11 mHz; AC-Volts 10 mHz. DC-Voltages 0-0.3,1,3,10,30,100, 1000. AC-Voltages 0-0.3,1,3,10,30,100,300,1000. Current ranges 0-0.1,1,10,100,1000 Ma-DC. Measures resistances to 1000 megohms in 7 ranges. Accuracy: DC and AC. ±3% of full scale; resistance ±3° of arc. Frequency response: ±0.5 db 20 Hz to 100 kHz on 0-0.3, 1, 3 v-ac ranges; ±0.5 db 20 hZ to 20 kHz on 0-10, 30, 100 v-ac ranges. Furnished with isolating probe and manual.

Cat. 29-313	Model 313 Solid State VOM	**Net $130.00**
Cat. 29-00191	10 kHz to 250 mHz RF Probe	**Net $11.75**
Cat. 29-00192	50 KV Hi-Voltage Probe	**Net $19.00**
Cat. 29-00577	Vinyl Carrying Case	**Net $17.00**



MODEL 2100

FOR DESK TOP AND LAB BENCH

Large easy-to-read scale, knife-edge pointer. Self-shielded DC and AC rectifier movements. DC meters have ±2% full scale accuracy. AC meters ±3% full scale accuracy. Four color-coded, multi-range binding posts, one common and three for range selection.

Cat. No.	Ranges	Net Ea.
	DC METERS	
29-17950	0-1.5-3-30 Amps	$34.80
29-17951	0-1-10-100 MA	34.80
29-17952	0-25-50-500 MA	34.80
29-17953	0-10-50-250 μA	66.90
29-17954	0-1.5-3-30 V	34.80
29-17955	0-10-25-100 V	35.70
	AC VOLTMETERS (RECTIFIER TYPE)	
29-17956	0-3-15-150 V	$49.80
29-17957	0-30-150-300 V	49.80
29-17958	0-150-300-600 V	49.80
	DC OHMETER	
29-17960	0-1K-100K	$39.00

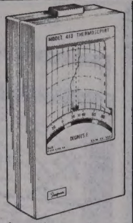
Portable instrument kit, without mener, for use with any Century Series meter.

29-17949	Portable instrument kit	**$7.50**

SIMPSON INSTRUMENTATION PRODUCTS

413 TEMPERATURE RECORDER

PRECISION CLOCK MOTOR 24, 48 OR 96 MM/DAY CHART SPEEDS

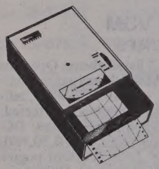


A completely portable temperature recorder that uses inkless, pressure-sensitive chart paper that will not smudge, blur or fog with age. Uses no batteries, no external power and no ink, A precision built, clock motor operates the recorder for more than a month on one winding. It records accurately under extremes of shock or temperature and gives instantly the maximum and minimum temperatures reached. This makes it ideal for checking on shipments in transit as it can be packed with merchandise and will give correct temperature recordings for transit or storage periods. Accuracy ±1.5% of full scale. Response time: 15 minutes for 50% temperature change; 40 minutes for 90% change. Recording Range: 120° Fahrenheit full-scale span. Chart speeds 24, 48 or 96 mm/day selectable with interchangeable gears. Overall size 3.6" wide, 1.8" deep, 6.5" high, Weight 2.2 pounds. Furnished with two rolls of chart paper, interchangeable gears for chart speeds of 24, 48, or 96 mm/day, a plastic bag, and an instruction manual. When ordering specify +30° to +150°, 0 to +120°, or -30° to +90°F.

Cat. 29-413	Temperature Recorder	**Net $130.00**

SIMPSON 603

STRIP CHART RECORDER



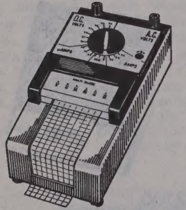
Inkless pressure sensitive recording, Taut Band movements. Maximum recording error on DC models is ±2.5% of full scale. AC models have ±4% accuracy. Can be switched between the four speeds while the chart is moving. and record cycling with the built-in event indicator. Self-shielded meter is clearly visible for indication with or without recording. Constructed of high impact polycarbonate case. High speed models: 3, 12, 24, 36 in/hr. Low speed models: ¼, 1, 2, 3 in/hr.

L Speed Cat. No.	H Speed Cat. No.	Range*	Net Ea.
29-20101	29-20001	0-50 DC μA	$107.00
29-20105	29-20005	0-1 DC mA	90.00
29-20118	29-20018	0-5 DC A	98.00
29-20119	29-20019	0-50 DC mV	93.00
29-20130	29-20030	0-150 DC V	96.00
29-20150	29-20050	0-5 AC A	120.00
29-20180	29-20080	0-150 AC V	102.00

*Other ranges available on request.

604 MULTI-RANGE CHART RECORDER

3 CHART SPEEDS



Built-in switch selection of any one of 22 AC/DC Voltage or AC/DC Current ranges, plus a choice of 3 built-in chart speeds, eliminates the need for separate instruments. The shock-proof, Taut Band meter movement provides accurate recording and visual readout. Specially formulated chart paper (2.6" x 50 ft.) will not blur or fog with age. Inkless trace is made with fast (2 sec.) sequential impressions. Built-in selection of 1/3/12 inches/hour chart speeds. Accuracy: recording ±2.5% of full scale; indication ±1.5% of full scale. The Model 604 records and indicates 0-100/500 DC Millivolts, 0-2.5/10/25/100/250/500 DC Volts, 0-10/25/100/250/500 AC Volts, 0-50/250 DC Microamps, 0-1/5/25/100/250 DC Milliamps, 0-1 DC Amps, and 0-200 AC Microamps. Sensitivity: DC Volts 20,000 ohms/volt; AC 5,000 ohms/volt. Synchronous chart drive motor operates from 115 v-ac, 60 Hz. Wt. 5.5 lbs. Furnished complete with test leads, 2 rolls chart paper and instructions.

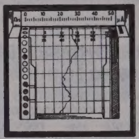
Cat. 29-12612	Model 604 MULTIcorder	**Net $220.00**
Cat. 29-00682	30/60/90 inches/hour Gear Unit*	**Net $30.00**
Cat. 29-02612	Chart paper for 604 (10 rolls)	**Net $20.00**
Cat. 29-02611	Carrying Case for 604 or 605	**Net $27.00**

MODEL 605 CHART RECORDER

Basically the same as Model 604 above, but with built-in switch selection of 24 AC/DC Voltage and AC/DC Current ranges. Provides recording and visual indication for 0-12/30/60 DC Millivolts, 0-3/15/60/300/600 DC Volts, 0-3/30/150/300/600 AC Volts, 0-600 DC Microamps, 0-1.5/3/6/30/150 DC Milliamps, 0-1/2/6 DC Amps, 0-3/15/60/300 AC Milliamps, and 0-1/2/6 DC Amps. Sensitivity; DC and AC 666 ohms/volts. Furnished complete with test leads, 2 rolls of chart paper and operator's manual. *Gear unit fits both 604 and 605.

Cat. 29-12613	Model 605 MULTIcorder	**Net $235.00**
Cat. 29-02614	Chart paper for 605 (10 rolls)	**Net $20.00**

2750 PRECISION LOW SPEED CHART RECORDER

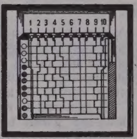


Miniature recorders for making long term recordings of electrical values, or of other variables through the use of suitable transducers, with provision for direct visual readout of the electrical value. Chart speed is 20 mm/hour (0.787") with built-in 6:1 ration control for 120 mm/hour speed. Pressure-sensitive chart paper (2.56" wide x 50 ft.) is calibrated for 24 hour periods at 20 mm/hour speeds. Clamp rate every 3 seconds. Accuracy: DC ±1.5% F.S; Synchronous motor drive operates from 90-160 v-ac, 60 Hz, requires 3 VA. Overall size: front 3.78" square x 0.91" extension; depth 8.47". Panel cutout 3.60" square. Wt: 4 lbs. Recorders are furnished complete with 2 rolls chart paper, panel mounting bracket, and a 5-foot, 3-wire power cord and plug. *Box of 10 rolls.

Cat. 29-22003	For 0-100 uA, res. 970 ohms	**Net $147.50**
Cat. 29-22116	For 0-300 V-AC, 1,000 ohms/v.	**Net $148.00**
Cat. 29-22311	50 Division Chart Paper*	**Net $20.00**
Cat. 29-22310	30 Division Chart Paper*	**Net $20.00**

Model 2750 Chart Recorders are available for practically any DC or AC Voltage or Current. Complete information for these models will be mailed free on request.

MINIATURE 10-CHANNEL EVENT RECORDER

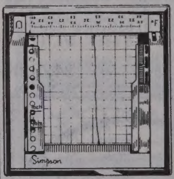


Model 2755 Event Recorder was designed for use where a precise record of the on/off periods of circuits or controls is required. It gives both a visual and a recorded graph of up to 10 sources. Inputs are to screw terminal pairs on the rear of the recorder. Pen drive solenoids operate from 24 v-dc, require 1.2 watts each. Chart speed is 20 mm/hour (0.787") with built-in 6:1 ratio control for 120 mm/hour speed. Pressure sensitive chart paper (2.56" wide x 50 ft.) is calibrated for 24-hour periods at 20 mm/hour speed. Synchronous motor drive operates from 90-160 v-ac, requires 3 VA. Overall size and mounting same as Model 2750 above. Furnished with 2 rolls chart paper, panel mounting bracket, and a 5-ft. 3-wire power cord and plug.

Cat. 29-22201	10-Channel Event Recorder	**Net $175.00**
Cat. 29-22380	Chart paper (10 rolls)	**Net $20.00**

MINIATURE CHART RECORDERS

Overall size only 3.75" square by 9.125" deep. Specially formulated pressure-sensitive chart paper requires no ink, provides continuous recording for over a month on one roll of chart paper. Switch selectable chart speeds of 20 mm (0.79") and 120 mm (4.72") per hour. Chart paper 2.6" wide x 50' long. Take-up reel is built-in. automatic motor driven. Motor drive is synchronous, 3 VA, 90-160 V-AC, 60 Hz. Furnished with two rolls of chart paper.

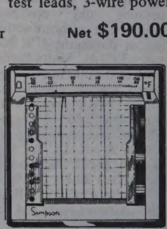


THREE TEMP. MODEL 2761

Three built-in temperature ranges are switch selectable. Temp. ranges are -50°F to +50°F, +50°F to +150°F, and +150°F to +250°F. Accuracy of recording ±2° over range of 0° to 120° F; ±3° over the balance of range. Imperssion rate 3 sec Furnished with test leads, 3-wire power cord, and operator's manual.

Cat. 29-2761	Temperature Recorder	**Net $190.00**

SIMPSON DUAL CHANNEL MODEL 2762



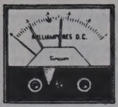
Dual channel temperature recorder has two inputs, records same temperature on both channels. Two different temperature ranges; -40°F to +60°F, and +50°F to +150°F are switch selectable. Accuracy of recording ±2°F. Impression rate 6 seconds, ten times on one channel, two times on the other channel. Furnished complete with test leads, 3-wire power line cord, and operators' manual.

Cat. 29-2762	Temperature Recorder	**Net $210.00**

2761 & 2762 ACCESSORIES

Cat. 29-00789	Free air temperature probe	**Net $13.00**
Cat. 29-00790	Surface temperature probe	**Net $10.00**
Cat. 29-23237	20 mm/hour chart paper for 2761	**10 for $18.00**
Cat. 29-23241	20 mm/hour chart paper for 2762	**10 for $18.00**
Cat. 29-23239	60 mm/hour chart paper for 2761	**10 for $18.00**
Cat. 29-23243	60 mm/hour chart paper for 2762	**10 for $18.00**

SIMPSON PANEL METERS



RELAYS & CONTROLLERS

CONTACTLESS TYPE

For control, alarm and limit applications. Photoconductor sensing eliminates all interference with the indicating meter. High gain transistor switch circuit provides accurate switching and a "dead band" of no more than 0.5% of full scale. Fail safe circuitry opens output relays in the event of a power failure. Output relays are DP-DT, with 10 ampere contacts. Rugged Seal construction withstands rigorous environmental conditions. Units operate from 115 v-ac, 50-500 Hz. Flange size 4.68" wide x 4.15" high. Body 2.72" dia. x 4.55" deep. TB types are self-shielding Taut Band movements. Others are self-shielding annular movements. Single point units control high point over 0-100% of scale. Dual control units: low limit 0-95% of arc; high limit 95-100% of arc. Adjustable to within 4° of each other.

4.5" MODEL 3324TXA

		1 Control Point		2 Control Points	
Full Range	Approx. Res. Ω	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
0-10 uA-DC TB	5500	29-16614	$138.00	29-16615	$168.15
0-25 uA-DC TB	3000	29-16612	128.10	29-16613	158.25
0-15 uA-DC TB	2000	29-16610	119.85	29-16611	150.00
0-100 uA-DC TB	570	29-16608	116.40	29-16609	146.55

4.5" MODEL 3324XA

Full Range	Approx. Res. Ω	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
0-200 uA-DC	570	29-16453	116.40	29-16472	146.55
0-500 uA-DC	220	29-16454	116.40	29-16473	146.55
0-1 mA-DC	80	29-16455	115.20	29-16474	145.50
0-50 mV-DC	10	29-16460	115.50	29-16480	145.80
-75° to +225°	5	29-16801	120.00	29-16807	156.00
0° to +500°	10	29-16804	117.00	29-16809	153.00

4.5 MODEL 3344XA

Full Range	Approx. Res. Ω	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
0-5 Amps-AC	.5 VA	29-16465	127.05	29-16485	157.35
0-10 V-AC	1000Ω/V	29-16570	124.35	29-16575	154.50

3.5" MODEL 3323XA

Full Range	Approx. Res. Ω	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
0-1 mA-DC	80	29-16500	111.90	29-16637	142.20
0-50 mV-DC	10	29-16505	112.20	29-16638	142.50

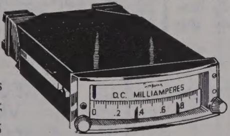
TEMPERATURE MODEL 3324XA

Full Range	Approx. Res. Ω	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
-75 to 250	5	29-16801	120.00	29-16807	156.00
0 to 300	5	29-16802	120.00	29-16808	156.00
0 to 500	10	29-16803	117.00	29-16809	153.00
0 to 750	10	29-16804	117.00	29-16810	153.00
0 to 1000	10	29-16805	117.00	29-16811	153.00
0 to 1500	10	29-16806	117.00	29-16812	153.00
0 to 2000	10	29-21278	117.00	29-21280	153.00
0 to 2500	10	29-21279	117.00	29-21281	153.00

THERMOCOUPLES

For use with the temperature controls above. These are iron constantan thermocouples with glass overbraid. They are suited for most general purposes or permanent mounting in sheaths or conduit.

Cat. 29-21222	Res. 10 ohms, length 137", 24 ga.	**Net $5.85**
Cat. 29-21223	Res. 10 ohms, length 34", 30 ga.	**Net $4.90**



CONTACTLESS METER RELAYS

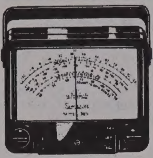
Single and double set models with mode indication lamps. Each set point position has SPDT relay rated 5 amps resistive, 115 v-ac, 50-500 Hz per pole, removeable set point knobs to prevent tampering. Relays are field-replaceable. Power ratings: 4 VA, max. single set point, 6 VA max. double set point. Life 1 million operations. Set points: single, 0-100% of full scale, double 0-98% low and 2-100% high. Can be set within 2° of each other. Control switching within 1.0% of set points. Dead band less than 0.5% of scale. Also available as temperature controller or photocell output meter relay.

3623XA DC METER RELAYS

Cat. No.	Meter Scale	Set Points	Ea. 1-9	10-24	25-49
29-16839	0-50 uA-DC	Single	$122.00	$109.80	$103.70
29-16840	0-50 uA-DC	Double	153.00	137.70	130.05
29-16841	0-100 uA-DC	Single	116.00	104.40	98.60
29-16842	0-100 uA-DC	Double	147.00	132.30	124.95
29-16847	0-1 mA-DC	Single	110.00	99.00	93.50
29-16848	0-1 mA-DC	Double	141.00	126.90	119.85
29-16849	0-50 mV-DC	Single	113.00	101.70	96.05
29-16850	0-50 mV-DC	Double	144.00	129.60	122.40

3643CA AC METER RELAYS

Cat. No.	Meter Scale	Set Points	Ea. 1-9	10-24	25-49
29-16851	0-5 A-AC	Single	$119.00	$107.10	$101.15
29-16852	0-5 A-AC	Double	150.00	135.00	127.50
29-16853	0-10 V-AC	Single	116.00	104.40	98.60
29-16854	0-10 V-AC	Double	147.00	132.30	124.95
29-16855	0-150 V-AC	Single	116.00	104.40	98.60
29-16856	0-150 V-AC	Double	147.00	132.30	124.95

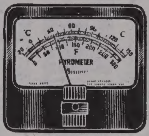


MODEL 389-3L THERM-O-METER®

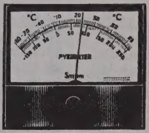
-50°F TO +100°F & +100°F TO +250°F

Separate inputs, with selector switch for 3 leads, permits simultaneous readings in 3 locations. Readings are made in 15 to 30 seconds, depending on medium being checked. Scale calibrated in both Centigrade and Fahrenheit degrees. Supplied with 00010 thermister lead operator's manual. Additional leads and probes are listed below. Overall size 7.937" x 6" x 2.937". Weight 4 lbs.

Cat. 29-389-3L	Therm-o-Meter®	**Net $82.50**
Cat. 29-00790	Surface temperature probe	**Net $10.00**
Cat. 29-00789	Free air temperature probe	**Net $13.00**
Cat. 29-00010	Additional thermister lead	**Net $10.00**
Cat. 29-00216	30 ft. thermister lead	**Net $11.00**
Cat. 29-00415	50 ft. thermister lead	**Net $12.00**
Cat. 29-00416	100 ft. thermister lead	**Net $15.00**
Cat. 29-00417	150 ft. thermister lead	**Net $19.00**
Cat. 29-05262	Vinyl Carrying Case	**Net $15.50**



MODEL 29



MODEL 3324

PYROMETERS

Fully compensated for ambient temperature changes and include copper circuit compensation. Calibrated for use with Simpson iron constantan thermocouples which are available as accessory items. Pyrometers with -20 to +150°C range are calibrated for 5-ohm thermocouple resistance; all others for 10 ohms. Each pyrometer is supplied with an external, adjustable series resistor to permit use of lower resistance thermocouples in the field. Accuracy: 2%. Size: Model 29, 4.66" W x 1.70" D (behind panel) x 4.20" H; mtg. centers, 4" x 3.56". Model 3324, 4.68" W x 1.89" D (behind panel) x 4.15" H; mtg. centers, 4" x 3.56". Other ranges available upon request.

MODEL 29

Cat. No.	Temperature Range °C	Net 1-9	10-24
29-21202	-20 to 150	$38.25	$34.43
29-21204	-20 to 260	38.25	34.43
29-21208	-20 to 540	38.25	34.43
29-21210	-20 to 1200	35.55	32.00

MODEL 3324

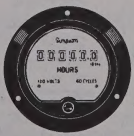
Cat. No.	Temperature Range °C	Net 1-9	10-24
29-21201	-100 to 120	52.05	46.85
29-21207	-20 to 400	52.05	46.85
29-21213	-20 to 820	49.35	44.42
29-21215	-20 to 1380	49.35	44.42

IRON CONSTANTAN THERMOCOUPLES

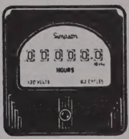
Stainless steel overbraid for extra-rugged service, or glass cloth for general purpose or permanent mtg. in protected sheaths. Pyrometers for -20 to +150°C take 5-ohm; all others, 10-ohm.

Cat. No.	Res. Ohms	Overbraid	Length Inches	Ga.	Net 1-9	10-24
29-21221	5	Stainless steel	162	20	$14.85	$13.37
29-21222	10	Glass cloth	137	24	5.25	4.73
29-21223	10	Glass cloth	34	30	4.50	4.05
29-21224	10	Stainless steel	325	20	27.00	24.30

1357ET



55ET



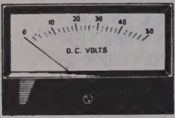
57ET

ELAPSED TIME METERS

Used in research labs, manufacturing plants, broadcast stations, etc., to keep performance records based on operating time. *60 Hz.

Cat.	Model	Flange Size	Counts	Opr. V.	Net Ea.
29-03595	1357ET	3.25" x 3.25"	0-99,999.9	120*	$26.70
29-03580	55ET	3.50" dia.	0-99,999.9	120*	26.70
29-03590	57ET	3.00" x 3.12"	0-99,999.9	120*	26.70

SIMPSON PANEL METERS



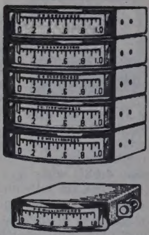
DESIGNER SERIES

Attractive phenolic cases with glass windows. Long easy-to-read scales. 3.5" models are 3.95" wide x 2.67" high, 4.5" models 4.50" wide x 2.90" high. DC meters are self-shielding. AC meters are iron vane movements.

Full Range	3.5" MODEL 523 Cat. No.	Ea. 1-9	4.5" MODEL 524 Cat. No.	Ea. 1-9
0-15 V-DC	29-15040	$21.90	29-15110	$24.00
0-50 V-DC	29-15044	21.90	29-15114	24.00
0-100 V-DC	29-15045	21.90	29-15111	24.00
0-150 V-DC	29-15046	21.90	29-15116	24.00
0-5 Amp-DC	29-15033	$21.15	29-15103	$22.95
0-10 Amp-DC	29-15030	21.15	29-15100	22.95
0-25 Amp-DC	29-15035	21.15	29-15105	22.95
0-50 Amp-DC	29-15036	21.15	29-15106	22.95
0-1 mA-DC	29-15000	$20.55	29-15070	$21.90
0-10 mA-DC	29-15002	20.55	29-15077	21.90
0-50 mA-DC	29-15003	21.15	29-15078	22.95
0-100 mA-DC	29-15010	21.15	29-15080	22.95
0-300 mA-DC	29-15012	21.15	29-15081	22.95
0-500 mA-DC	29-15013	21.15	29-15082	22.95
0-15 uA-DC	29-15014	$38.25	29-15092	$41.70
0-50 uA-DC	29-15017	26.10	29-15087	28.20
0-100 uA-DC	29-15019	24.00	29-15089	26.70
0-500 uA-DC	29-15022	21.60	29-15093	23.40
50-0-50 uA-DC	29-15025	24.00	29-15095	26.85

	3.5" MODEL 553		4.5" MODEL 554	
0-150 V-AC	29-15060	$21.60	29-15130	$22.95
0-250 V-AC	29-15061	21.60	29-15131	22.95
0-300 V-AC	29-15062	21.60	29-15132	22.95
0-5 Amp-AC	29-15050	$19.20	29-15120	$22.35
0-15 Amp-AC	29-15051	19.20	29-15123	22.35
0-50 Amp-AC	29-15054	19.20	29-151.24	22.95

EDGEWISE METERS
FOR STACKING

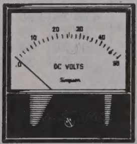


New self-shielding, core magnet movement eliminates protruding barrel and permits close stacking without any effect on calibration. Dust-proof construction with rust-proofed steel housing and plastic window. Dielectric 1500 v-rms. 1½" Model 1921 fits .525" x 1.718" panel cutout, has removeable mounting brackets with clamping screws. Scale length 1.37". 2½" Model 1622 fits .562" x 2.312" panel cutout, has bevel, bracket, lockwashers and nuts. Length 1.85". Shpg. wts.: Model 1921 5½ oz. 1622 6½ oz. Accuracy ± 2% F.S.

Full Scale	Approx. Res.	1½" Model 1921 Cat. No.	Ea. 1-9	2½" Model 1622 Cat. No.	Ea. 1-9
0-10 Volts DC	5000Ω/V	29-18000	$22.50	29-18006	$23.85
0-15 Volts DC	5000Ω/V	29-18001	22.50	29-18007	23.85
0-25 Volts DC	5000Ω/V	29-18002	22.50	29-18008	23.85
0-50 Volts DC	5000Ω/V	29-18003	22.50	29-18009	23.85
0-150 Volts DC	5000Ω/V	29-18004	22.50	29-18010	23.85
0-500 Volts DC	5000Ω/V	....	.....	29-18011	23.85
0-1 Milliamp DC	18Ω	29-18012	22.05	29-18019	23.70
0-5 Milliamp DC	2Ω	29-18013	22.05	29-18020	23.70
0-10 Milliamp DC	5Ω	29-18014	22.05	29-18021	23.70
0-25 Milliamp DC	2Ω	29-18015	23.25	29-18022	24.60
0-50 Milliamp DC	1Ω	29-18016	23.25	29-18023	24.60
0-100 Milliamp DC	.5Ω	29-18017	23.25	29-18024	24.60
0-500 Milliamp DC	.1Ω	29-18018	23.25	29-18025	24.60
0-50 Millivolt DC	20Ω	29-18028	23.55	29-18029	24.90
0-25 Microamp DC	7760Ω	29-18030	28.95	29-18035	30.15
0-50 Microamp DC	2020Ω	29-18031	28.65	29-18036	29.85
0-100 Microamp DC	1060Ω	29-18032	25.65	29-18037	27.15
0-200 Microamp DC	310 Ω	29-18033	23.55	29-18038	24.90
0-500 Microamp DC	63 Ω	29-18034	22.95	29-18039	24.15
0-150 Volts AC*	5000Ω/V	29-18042	28.05	29-18043	29.40

*Rectifier type.

SIMPSON "CENTURY SERIES" PANEL METERS



Attractive and rugged molded black phenolic cases with glass windows. D-C Meters have self-shielding movements and the calibration is not affected by stray magnetic fields or by mounting on steel panels. All A-C Meters have an Iron Vane movement. A-C Milliammeters and A-C Ammeters are calibrated for 25 thru 800 Hz. A-C Voltmeters are calibrated for 25 thru 125 Hz. Ranges other than those listed are also available. Prices and delivery on request.

"CENTURY SERIES" SPECIFICATIONS

Meter Size	DC	Rect. AC	Vane Type	RF	Watt	Size W. x H.	Scale Lgth.
1.5"	2121	2141	....	....	....	1.75" x 1.75"	1.50"
2.5"	2122	2142	2152	....	....	2.38" x 2.38"	2.30"
3.5"	2123	2143	2153	2133	2173	3.00" x 3.00"	3.14"
4.5"	2124	2144	2154	2134	2174	4.66" x 4.20"	3.93"

D-C VOLTMETERS. Self-Shielded.

Full Scale	Ω Res.	1.5" 2121 Cat. No.	Ea. 1-9	2.5" 2122 Cat. No.	Ea. 1-9	3.5" 2123 Cat. No.	Ea. 1-9	4.5" 2124 Cat. No.	Ea. 1-9
0-5		29-17840	19.80	29-17445	21.15	29-17525	21.90	29-17618	24.00
0-10	1000	29-17842		29-17446		29-17527		29-17620	
0-15	Ω/V.	29-17843		29-17447		29-17528		29-17621	
0-25		29-17844		29-17448		29-17529		29-17622	
0-50		29-17846	19.80	29-17450	21.15	29-17531	21.90	29-17624	24.00
0-100	1000	29-17848		29-17451		29-17532		29-17625	
0-150	Ω/V.	29-17849		29-17452		29-17533		29-17626	
0-300		....		29-17455		29-17536		29-17629	
0-500	2000	29-17851	24.60	29-17456	21.90	29-17537	22.95	29-17630	24.75
0-1000	Ω/V.	....		29-17458	27.45	29-17539	28.35	29-17632	30.30

The 3.5" and 4.5" 0-1000 volt meters have external Model 183 multipliers.

D-C AMMETERS. Self-Shielding.

0-1	.050	29-17800	19.80	29-17400	20.25	29-17475	21.15	29-17565	22.95
0-3	.0166	29-17802		29-17403		29-17478		29-17568	
0-5	.010	29-17803		29-17404		29-17479		29-17569	
0-10	.005	29-17805		29-17405		29-17480		29-17570	
0-15	.0033	29-17806†	19.80	29-17406	20.25	29-17481	21.15	29-17571	22.95
0-25	.002	29-17807†		29-17407		29-17482		29-17572	
0-30	.0017	....		29-17408		29-17483		29-17573	
0-50	.001	29-17808†		29-17409†		29-17484		29-17574	

†Basic 0-50 MV meters for use with accessory external shunt. All other ranges are self-contained. For higher ranges use a 0-50 D-C Millivoltmeter with an accessory external shunt.

SEGMENTAL A-C VOLTMETERS

The significant portion of the overall voltage range is expanded to occupy the full scale length, making it possible to measure small changes. Meters listed below are average sensing. Accuracy: † ±.5%; ‡ ±.75%. Frequency range: *20-2000 Hz; §50-1000 Hz.

Full Scale	Ctr. AC-V	3.5" 2143 Cat. No.	Ea. 1-9	4.5" 2144 Cat. No.	Ea. 1-9
100-130	115†*	29-17548	63.00	29-17638	63.30
100-130	115† §	....		29-17639	78.30
200-260	230‡ §				
400-520	460‡ §				

SIMPSON CENTURY PANEL METERS cont'd

D-C MILLIAMMETERS. Self-Shielding.

ll ale	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
1	43	29-17825	18.90	29-17430	19.95	29-17510	20.55	29-17600	21.90
5	2	29-17826		29-17432		29-17512		29-17602	
10	10	29-17827		29-17433		29-17513		29-17603	
15	6.6	29-17828		29-17434		....		29-17604	
25	4	29-17829	19.80	29-17436	20.25	29-17516	21.15	29-17606	22.95
50	2	29-17830		29-17437		29-17517		29-17607	
100	1	29-17832		29-17438		29-17518		29-17608	
150	.66	29-17833		29-17439		29-17519		29-17609	
200	.50	29-17834		29-17440		29-17520		29-17610	
250	.40	29-17835	19.80	29-17441	20.25	29-17521	21.15	29-17611	22.95
300	.33	29-17836		29-17442		29-17522		29-17612	
500	.20	29-17837		29-17443		29-17523		29-17613	
750	.13	....		....		29-17524		29-17614	
1000	.05	....		29-17444		....		29-17615	

eter resistances not for 1.5" Model 2121.

D-C MICROAMMETERS. Self-Shielding.

50	1800†	29-17815	24.75	29-17418	25.65	29-17499	26.10	29-17589	28.20
100	1800	29-17816	22.05	29-17420	22.95	29-17501	24.00	29-17591	26.70
200	1100	29-17818	20.10	29-17422	20.85	29-17503	21.90	29-17593	24.00
500	90‡	29-17819	19.80	29-17424	20.55	29-17505	21.90	29-17595	23.30
-0-25		29-17820	24.90	....	.....	29-17506	26.40	29-17596	28.35
-0-50		29-17821	22.35	29-17425	23.40	29-17507	24.00	29-17597	26.85
0-0-100		29-17822	20.25	29-17426	21.15	29-17508	22.05	29-17598	24.30
0-0-500		29-17823	29.20	29-17427	20.10	29-17509	20.85	29-17599	22.05

odel 2121 resistance: †5500 Ω;‡ 190 Ω.

TAUT BAND D-C MICROAMMETERS*

5	5750	....	.....	....	.....	29-17495	48.60	29-17585	51.60
10	4900	....	.....	29-17415	40.95	29-17496	42.75	29-17586	46.20
15	1960	....	.....	29-17416	37.20	29-17497	38.25	29-17587	41.70
25	1960	....	.....	29-17417	35.40	29-17498	37.05	29-17588	40.20
50	960	....	.....	29-17419	27.75	29-17500	28.35	29-17590	30.45
100	500	....	.....	29-17421	25.20	29-17502	26.10	29-17592	28.80
200	234	....	.....	29-17423	23.70	....	.....	29-17594	27.15

elf-Shielding movements.

D-C MILLIVOLTMETERS*

Full Scale	Ω Res.	2.5" 2122 Cat. No.	3.5" 2123 Cat. No.	4.5"2124 Cat. No.
0-50	10	29-17472	29-17540	29-17636
50-0-50	20	....	29-17541	29-17635
		Net 1-9	Net 1-9	Net 1-9
		$20.25	$21.15	$22.95

DC GALVANOMETERS*

50-0-50†	43	29-17470	29-17558	1-9	$20.85
50-0-50‡	1800	....	29-17559	1-9	23.40
		Net 1-9			
		$19.95			

*Self-Shielding. Sensitivity: †500-0-500 uA;
‡ 75-0-75 uA.

WATTMETERS
DYNAMOMETER TYPE
SINGLE PHASE

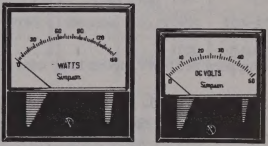
Calibrated for either magnetic or non-magnetic panels. Frequency range 25 to 125 Hz. Accuracy ±2% F.S. *Compensated type. Accuracy ±3%. F.S.

			3.5" 2173		4.5" 2174	
Watts Range	Max. V.	Max. A.	Cat. No.-29★	Ea. 1-9	Cat. No.-29★	Ea. 1-9
0-75	150	1.0	17881	42.75	17896	53.10
0-150	150	2.0	17882	42.75	17897	53.10
0-300	150	4.0	17883	42.75	17898	53.10
0-750	150	10.0	17885	42.75	17900	53.10
0-600	300	4.0	17884	46.35	17899	56.70
0-1500	300	10.0	17886	46.35	17901	56.70
0-3000	300	10.0	17887	46.35	17902	56.70
0-10*	300	.175	17875	68.25	17890	70.95
0-20*	300	.400	17876	68.25	17891	70.95
0-30*	500	.650	17878	68.25	17892	70.95
0-20*	300	.175	17877	68.25	17893	70.95
0-30*	500	.300	17879	68.25	17894	70.95
0-50*	500	.500	17880	68.25	17895	70.95

★Be sure to include entire Cat. No.

A-C VOLTMETERS. RECTIFIER TYPE. Self-Shielding.

		1.5" 2141		2.5" 2142		3.5" 2143		4.5" 2144	
ll le	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
		29-17855	27.15	29-17460	25.20	29-17542	28.80	29-17640	31.95
0		29-17856		....		29-17543		29-17641	
5	2000	....		....		29-17544		29-17642	
0	Ω/V.	....		....		29-17545		29-17643	
50		29-17860		29-17462		29-17546		29-17644	
00		29-17861		....		....		29-17645	



CENTURY SERIES

A-C VOLTMETERS. Iron Vane Type.

		2.5" 2152		3.5" 2153		4.5" 2154	
ll le	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
	33	....	19.20	29-17725	20.10	....	22.50
0	133	29-17685		29-17726		29-17771	
5	300	29-17686		29-17727		29-17772	
5	833	29-17687		29-17728		29-17773	
0	3,333	29-17688		29-17729		29-17774	
00	16,666	....	.....	29-17730	20.85	29-17775	22.50
50	25,000	29-17690	21.10	29-17731	21.60	29-17776	22.95
50	41,166	29-17691	21.10	29-17732	21.60	29-17777	22.95
00	50,000	29-17692	21.10	29-17733	21.60	29-17778	22.95
00	83,333	....	......	29-17734	27.30	29-17779	29.25

equency range 25 thru 125 Hz.

R-F AMMETERS. Self-Shielding.

		3.5" MODEL 2133		4.5" MODEL 2134	
e	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
	.343	....	$24.30	29-17650	$27.75
	.120	29-17552		29-17652	
	.08	29-17554		....	
	.045	29-17555		....	
	.023	29-17557		29-17657	

DB METERS. Self-Shielding.

	2.5" 2142		3.5" 2143		4.5" 2144	
le	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
to +6	29-17465	28.20	29-17549	30.00	29-17648	30.90

o power level: 6 mW into 500 Ω line.

A-C AMMETERS. Iron Vane Type.

		2.5" 2152		3.5" 2153		4.5" 2154	
Full Scale	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
0-1	.213	29-17665	18.50	29-17695	19.20	29-17740	20.40
0-2	.065	....		29-17697		29-17742	
0-3	.028	29-17667		29-17698		29-17743	
0-5	.008	29-17668		29-17699		29-17744	
0-10	.004	29-17669		29-17700		29-17745	
0-15	.0025	29-17670		29-17701		29-17746	
0-25	.002	29-17671	18.90	29-17702	19.95	29-17747	21.15
0-30	.0015	29-17672		29-17703		29-17748	
0-50	.001	29-17673		29-17704		29-17749	

Frequency range 25 thru 800 Hz. Self-contained thru 50 Amperes. For higher ranges use 0-5 A-C Ammeter with current transformer.

A-C MILLIAMMETERS. Iron Vane Type.

0-10	1650	29-17680	18.00	....	19.20	29-17760	20.40
0-50	80	29-17681		29-17716		29-17761	
0-100	17.2	29-17682		29-17717		29-17762	
0-250	3.15	29-17683		29-17718		29-17763	
0-500	.90	29-17684		29-17719		29-17764	

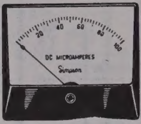
VU METERS. Self-Shielding.

	2.5" 2142		3.5" 2143		4.5" 2144	
Full Scale	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
A Scale	29-17473	33.45	29-17560	34.20	29-17646	37.20
B Scale	....	....	29-17561	34.20	29-17647	37.20

Reference level: 1 mW into 600 Ω line. VU meters meet Specifications established by Bell Labs and American Standards Association as required by broadcasting, communication and sound engineers. Use A Scale for wire lines. B Scale for broadcasting.

SIMPSON WIDE-VUE PANEL METERS

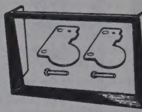
With specially formulated clear plastic windows for wide-angle readability and maximum protection against atmospheric or mechanical damage. The D-C and A-C Rectified type meters incorporate "self-shielding" movements unaffected by stray magnetic fields, or mounting on steel panels. A-C meters use iron vane movements. Accuracy: D-C, R-F and A-C Iron Vane ±2%., A-C Rectified ±3%.



"WIDE-VUE" BEZELS

For back of panel mounting on .125" to .187" panels. Complete with hardware.

Cat.		Net Ea.
29-1253	3.5" Wide-Vue	$2.25
29-1123	4.5" Wide-Vue	2.25
29-1165	Illumination Kit	2.10



D-C VOLTMETERS. Self-shielding

		1.5" 1212		2.5" 1227		3.5" 1327		4.5" 1329	
Full Scale	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
0-5		29-9540		29-9550		29-9720		29-9870	
0-10		29-9541		29-9560		29-9740		29-9890	
0-15	1000	29-9542	19.80	29-9570	21.15	29-9750	21.90	29-9900	24.00
0-25	Ω/V.	29-9543		29-9580		29-9760		29-9910	
0-30		29-9544		29-9590		29-9770		29-9920	
0-50		29-9545		29-9600		29-9780		29-9930	
0-100		29-9546		29-9610		29-9790		29-9940	
0-150	1000	29-9547	19.80	29-9620	21.15	29-9800	21.90	29-9950	24.00
0-200	Ω/V.	....	.....	29-9622		29-9810		29-9960	
0-300		....	.....	29-9630		29-9830		29-9980	
0-300		29-9548	19.80	....	.....	....	.....	....	.....
0-500	2000	29-9549*	24.60	29-9640	21.90	29-9840	22.95	29-9990	24.75
0-750	Ω/V.	....	.....	29-9650*	26.60	29-9850	22.95	29-10000	24.75
0-1000		....	.....	29-9660*	27.45	29-9860*	28.35	29-10010*	30.30

*External multipliers, Model 183, are furnished with these meters.

D-C AMMETERS. Self-Shielding.

0-1	.050	29-2431		29-2440		29-2640		29-2820	
0-1.5	.033	....		29-2450		29-2650		29-2830	
0-2	.025	29-2432	19.80	29-2460	20.25	29-2660	21.15	29-2840	22.95
0-3	.0166	29-2433		29-2470		29-2670		29-2850	
0-5	.010	29-2434		29-2480		29-2680		29-2860	
0-10	.005	29-2435		29-2490		29-2690		29-2870	
0-15	.0033	29-2436†		29-2500		29-2700		29-2880	
0-25	.002	29-2437†	19.80	29-2510	20.25	29-2710	21.15	29-2890	22.95
0-30	.0017	....		29-2520		29-2720		29-2900	
0-50	.001	29-2438†		29-2530†		29-2730		29-2910	
15-0-15	.0033	....		....		29-2790		....	
30-0-30	.0017	....		....		29-2800	22.35	....	
50-0-50	.001	....		....		29-2810		....	

†Supplied as 50 MV meters to be used with accessory external shunts.

D-C MILLIAMMETERS. Self-Shielding.

0-1	43.0	29-6163		29-6175		29-6310		29-6470	
0-3	2.0	....		29-6180		29-6320		29-6480	
0-5	2.0	29-6164	18.90	29-6190	19.95	29-6330	20.55	29-6490	22.95
0-10	10.0	29-6165		29-6200		29-6340		29-6495	
0-15	6.6	29-6166		29-6210		29-6350		29-6502	
0-20	5.0	....		29-6215		29-6360		29-6524	
0-25	4.0	29-6167		29-6220		29-6370		29-6530	
0-50	2.0	29-6168		29-6230		29-6380		29-6540	
0-100	1.0	29-6169	19.80	29-6240	20.25	29-6390	21.15	29-6550	22.95
0-150	.66	29-6170		29-6250		29-6400		29-6560	
0-200	.50	29-6171		29-6260		29-6410		29-6570	
0-250	.40	29-6172		29-6270		29-6420		29-6580	
0-300	.33	29-6173		29-6280		29-6430		29-6590	
0-500	.20	29-6174	19.80	29-6290	20.25	29-6440	21.15	29-6600	22.95
0-750	.13	....		....		29-6450		29-6610	
0-1000	.05	....		29-6292		29-6460		29-6620	

D-C MICROAMMETERS. Self-Shielding.

0-50	1800†	29-4294	24.75	29-4310	25.65	29-4380	26.10	29-4480	28.20
0-100	1800	29-4295	22.05	29-4320	22.95	29-4390	24.00	29-4490	26.70
0-200	1100	29-4296	20.10	29-4330	20.85	29-4400	21.90	29-4500	24.00
0-500	90‡	29-4297	19.80	29-4340	20.55	29-4410	21.60	29-4510	23.40
25-0-25	1800†	29-4298	24.90	....	.....	29-4420	26.40	29-4520	28.35
50-0-50	1800	29-4302	22.35	29-4350	23.40	29-4430	24.00	29-4530	26.85
100-0-100	1100	29-4300	20.25	29-4351	21.15	29-4440	22.05	29-4540	24.30
500-0-500	43	29-4301	19.20	29-4352	20.10	29-4450	20.85	29-4550	22.05

Resistance of Model 1212 is: † 5500 Ω; ‡ 190 Ω.

D-C MILLIVOLTMETERS. Self-Shielding.

0-50	10	29-7005	19.80	29-7010	20.25	29-7020	21.15	29-7030	22.95
50-0-50	10	....	.....	....	.....	29-7021	21.15	29-7031	22.95

WIDE-VUE METERS CONTINUED ON NEXT PAGE

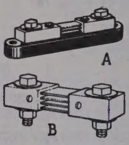
WIDE-VUE SPECIFICATIONS

Meter Size	DC	AC Rect.	Iron Vane	RF	Watt	Size" W. x H	Sc Lg
1.5"	12.2	1214	....	....	....	1.76 sq.	1.5
2.5"	1227	1247	1257	....	....	2.47 sq.	2.3
3.5"	1327	1347	1357	1337	....	3.25 sq.	3.1
4.5"	1329	1349	1359	1339	1379	4.68 x 4	3.9

Accuracy ±2%, A-C Rectified ±3%.

QUANTITY PRICES

Limited space does not permit us to show eve quantity price break.

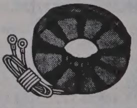


EXTERNAL D-C SHUNTS

50 MV DROP

For use where an external I shunt is required. Porta shunts (a) have a phen base. 5" leads included. curacy ± 1%.

PORTABLE			SWITCHBOARD		
Cat. No.	Amps	Ea. 1-9	Cat. No.	Amps	
29-6700	1	$11.70	29-6507	400	$15
29-6703	5	11.70	29-6508	500	18
29-6704	10	11.70	29-6509	600	21
29-6705	15	11.70	29-6510	750	27
29-6707	25	11.70	29-6511	800	29
29-6708	30	11.70	29-6512	1000	35
29-6709	50	11.70	29-6513	1200	42
29-6711	75	11.70	29-6514	1500	52
29-6713	100	11.70	29-6515	2000	58
29-6714	150	11.70	29-6516	2500	73
29-6715	200	11.70	29-6517	3000	87
SWITCHBOARD			29-6518	3500	122
29-6500	100	11.70	29-6519	4000	146
29-6503	150	12.60	29-6520	4500	160
29-6504	200	12.60	29-6521	5000	180
29-6505	250	12.60	29-6522	6000	199
29-6506	300	12.60	29-6523	7000	239
			....	....	...



CURRENT TRANSFORMERS

FOR A-C AMMETER

One turn inserted prim type for use with 0-5 A A-C Ammeters. High die tric insulation. Secondary 5 amps.

Cat. No.	Pri. Amps	Ea. 1-9	Cat. No.	Pri. Amps	
29-1293	50	$28.35	29-1300	300	$17
29-1306	75	28.85	29-1305	400	19
29-1297	100	17.25	29-1301	500	20
29-1298	150	15.30	29-2303	600	20
29-1299	200	15.30	29-2459	750	24
29-1312	250	13.35	29-2304	1000	26

SAFE GUARD

Provides the same p tection as is built in new Simpson Mo 260-5 Multimeter. Prevents accidental burn-o regardless of polarity. Complete instructions use with Simpson Models 260-1/2/3/4, or other similar Volt-Ohmmeter.

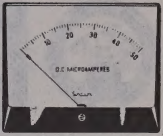
Cat. 29-12621 Meter Safe Guard **Net $2**

SIMPSON WIDE-VUE PANEL METERS cont'd

TAUT BAND D-C MICROAMMETERS. Self-Shielding.

		1.5" 1212T		2.5" 1227T		3.5" 1327T		4.5" 1329T		8" 728T	
ull cale	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
5	5750	....	.....	....	.....	29-4358#	48.60	29-4458#	51.60	....	.....
10	4900	....	.....	29-4303	40.95	29-4350	23.40	29-4459	46.20	....	.....
15	1960†	29-4601	37.20	29-4304	37.20	29-4361	38.25	29-4461	41.70	....	.....
25	1960‡	29-4602	34.65	29-4306	35.40	29-4371	37.05	29-4471	40.20	29-11200	46.35
50	960§	29-4603	37.15	29-4311	27.75	29-4381	28.35	29-4481	30.45	29-11201	40.80
100	500	29-4604	24.30	29-4321	25.20	29-4391	26.10	29-4491	28.80	29-11203	39.45

High flux annular taut band. Model 1212 res.: † 5000 Ω; ‡ 5780 Ω; § 600 Ω.



Model 728T
8" TAUT BAND METER

D-C GALVANOMETERS. Self-Shielding.

-0-50	43†	29-3692	18.15	29-3700	18.90	29-3730	19.80	29-3732	21.00
-0-50	1800‡	29-3694	19.20	29-3710	20.55	29-3720	22.20	29-3734	24.30

ensitivity: † 50-0-500 microamps; ‡ 75-0-75 microamps.

VU & DB METERS

VU Meters meet Bell Lab. specs. Reference level 1 milli-watt into 600 ohm line. DB Meter zero power level 6 milli-watts into 500 ohm line.

2.5" 1247		3.5" 1347		4.5" 1349	
VU A-SCALE		VU A-SCALE		VU A-SCALE	
Cat. No. 29-★	Ea. 1-9	Cat. No.29-★	Ea. 1-9	Cat. No.29-★	Ea. 1-9
10474	$33.45	10480	$34.20	10490	$37.20
VU B-SCALE		VU B-SCALE		VU B-SCALE	
....		10550	34.20	10560	37.20
-10 To +6 DB		-10 To +6 DB		-10 To +6 DB	
3483	28.20	3485	30.00	3487	30.90

★Be sure to include entire Cat. No. when ordering.

A-C VOLTMETERS. RECTIFIER TYPE. Self-Shielding.

		1.5" 1214		2.5" 1247		3.5" 1347		4.5" 1349	
ull cale	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
5		29-10011	27.15	29-10015	25.20	29-10020	28.80	29-10090	31.95
10	2000	29-10012		29-10016		29-10030		29-10100	
15	Ω/V.	....		....		29-10040		29-10110	
50		....	27.15	....	25.20	29-10050	28.80	29-10120	31.95
150	2000	29-10013		29-10017		29-10060		29-10130	
300	Ω/V.	29-10014		29-10018		29-10070		29-10140	

SEGMENTAL A-C VOLTMETERS

The significant portion of the scale is expanded to occupy the full scale length, making it possible to measure small changes in voltage. Meters listed below are average sensing. Accuracy: † ± .5%; ‡ ± .75%. Frequency range; *20-2000 Hz; §50-1000 Hz.

		3.5" MODEL 1347		4.5" MODEL 1349	
Full Scale	Ctr. Scale	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
100-130	115†*	29-10152	$63.00	29-10155	$63.30
100-130	115†§	....	......	29-10157	78.30
200-260	230‡§				
400-520	460‡§				

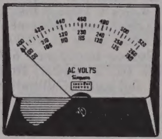
A-C VOLTMETERS. Iron Vane Type.

		2.5" 1257		3.5" 1357		4.5" 1359	
ull cale	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
5	33	....	19.20	29-10160	20.10	29-10260	22.50
10	133	29-9670		29-10170		29-10270	
15	300	29-9675		29-10180		29-10280	
25	833	29-9680		29-10190		29-10290	
50	3,333	29-9690		29-10200		29-10300	
100	16,666	29-9695	19.80	29-10210	20.85	29-10310	22.50
150	25,000	29-9700	20.10	29-10220	21.60	29-10320	22.95
250	41,166	29-9705	20.10	29-10230	21.60	29-10330	22.95
300	50,000	29-9710	20.10	29-10240	21.60	29-10340	22.95
500	83,333	29-9715	25.65	29-10250	27.30	29-10350	29.25

or 25 thru 125 Hz. 0-500 volt ranges with external multiplier.

MODEL 1379 WATTMETERS

DYNAMOMETER TYPE SINGLE PHASE



Calibrated for use on either magnetic or non-magnetic panels. Frequency range 25 to 125 Hz. Accuracy ±2% of full scale. *Compensated type wattmeters. Accuracy ±3% of full scale.

Range Watts	Range Volts	Max. Amps	Cat. No.	Ea. 1-9	10-24	25-49	50-99
0-75	150	1.0	29-10960	$53.10	$47.79	$45.14	$42.48
0-150	150	2.0	29-10970				
0-300	150	4.0	29-10975				
0-750	150	10.0	29-10990				
0-600	300	4.0	29-10980	56.70	51.03	48.20	45.36
0-1500	300	10.0	29-11000				
0-3000	300	20.0	29-11010				
0-10*	300	.175	29-10930	70.95	63.94	60.31	56.93
0-20*	300	.400	29-10940				
0-30*	300	.650	29-10950				

A-C AMMETERS. Iron Vane Type.

1	.213	29-2560	18.15	29-3130	19.20	29-3260	20.40
1.5	.105	29-2570		29-3140		29-3270	
2	.065	....		29-3150		29-3280	
3	.028	29-2575		29-3160		29-3290	
5	.008	29-2580		29-3170		29-3300	
10	.004	29-2590		29-3180		29-3310	
15	.0025	29-2599		29-3190		29-3320	
25	.002	29-2609	18.15	29-3200	19.95	29-3330	21.15
30	.0015	29-2615		29-3205		29-3340	
50	.001	29-2619		29-3210		29-3340	

or 25 thru 800 Hz. A-C Ammeters are self-contained. For higher nges use a 0-5 Amp A-C Ammeter with an accessory external rrent transformer. When ordered together the meter will have scale to match the current transformer rating.

A-C MILLIAMMETERS. Iron Vane Type.

10	1650	29-6294	18.15	29-6625	19.20	29-6665	20.40
50	80	29-6295		29-6630		29-6670	
100	17.2	29-6296		29-6640		29-6680	
250	3.15	29-6297		29-6650		29-6690	
500	.90	29-6300		29-6660		29-6699	

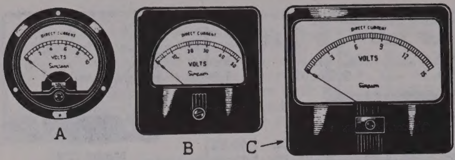
equency range 25 thru 800 Hz.

R-F AMMETERS. Self-Shielding.

		3.5" MODEL 1337		4.5" MODEL 1339	
Full Range	Ω Res.	Cat. No.	Ea. 1-9	Cat. No.	Ea. 1-9
0-5	.63	29-5362	$28.65	29-5364	$32.40
0-1	.343	29-2970	24.30	29-3050	27.75
0-2	.120	29-2990		29-3070	
0-3	.08	29-3010		29-3090	
0-5	.045	29-3020		29-3100	
0-8	.031	29-3030		29-3110	
0-10	.023	29-3040		29-3120	

Thermocouple type. Self-contained.

SIMPSON REPLACEMENT METERS



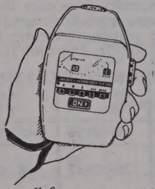
ROUND & RECTANGULAR PANEL METERS

The round and rectangular panel meters illustrated at the lef are the older styles and designs which have been used in electr cal and electronic equipment in the past. The demand for thes meters is largely for replacement in existing equipment. We lac sufficient space to catalog these according to function, rang size, etc. To help our customers to select the replacement m ter needed we have compiled the two tables below. The table the left gives meter functions, and the model numbers availab in each case size. The table at the right gives complete dimensional information accor ing to size and model number. Select the meter you need (according to function an size) from the left table, and check the mounting dimensions in the right table

Meter Reads	2.5"		3.5"		4.5"
	Rd.	Sq.	Rd.	Sq.	Sq.
D-C Volts	125	127	25	27	29
D-C Amps	125	127	25	27	29
D-C Ma.	125	127	25	27	29
D-C Ua.	125	127	25	27	29
D-C uA.*	125T	127T	25T	27T	29T
D-C mV.	125	127	25	27	29
D-C Galv.	125	127	25	27	29
A-C Volts	155	157	55	57	59
A-C Volts†	. . .	. . .	45	47	49
A-C Amps	155	157	55	57	59
A-C Ma.	155	157	55	57	59
A-C Ma.†	. . .	. . .	45	47	49
R-F Amps	135	137	35	37	39
R-F Ma.	. . .	. . .	35	37	39
Decibels	145	147	. . .	47	49
VU	. . .	. . .	45	47	142
Watts§	175	177	75	77	79

*Taut band type. †Rectified type. §Dynamometer type, single phase. A-C meters are iron vane type.

Meter Size	See Fig.	Meter Models	Flange W. x L.	Body Dia.	Body Depth	Stud Lgth.	Sca Lgt
2.5"	A	125,135,145,155	2.69" dia.	2.17"	1.39"	.70"	1.8
2.5"	B	127,137,147,157	2.37" x 2.37"	2.17"	1.45"	.70"	1.8
2.5"	A	175	2.69" dia.	2.17"	1.98"	.48"	1.6
2.5"	B	177	2.37" x 2.37"	2.17"	2.02"	.49"	1.6
3.5"	A	25,25T,35,45,55	3.50" dia.	2.75"	1.31"	.70"	2.5
3.5"	B	27,27T,37,47,57	3.00" x 3.12"	2.75"	1.36"	.70"	2.5
3.5"	A	75	3.50" dia.	2.75"	2.06"	.64"	2.3
3.5"	B	77	3.00" x 3.12"	2.75"	2.11"	.64"	2.3
4.5"	C	29,29T,39,49,59	4.66" x 4.20"	2.75"	1.00"	.70"	3.8
4.5"	C	79	4.66" x 4.20"	2.75"	1.68"	.64"	3.5
4.5"	C	142	4.25" x 3.94"	3.25"	1.00"	.70"	3.8



SIMPSON 885
SOUND LEVEL METER

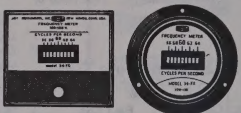
Provides a standard of performance for measuring noise and sound levels indoors and outdoors in accordance with O.S.H.A. (Occupational Safety and Health Standards) and Walsh-Healy requirements. Sound level range from 40 to 140 db in 10 db increments with 20 μNewtons/m as 0 db reference. Three selectable networks modify the overall frequency response to meet requirements of the A, B or C weighing curves in ANSI specifications S1.4-1971, for a Type 3 instrument. Lead-zirconite-titanite ceramic microphone is relatively stable in temperature and humidity environments. Accuracy meets the requirements of ANSI specs S1.4, for a Type 3 instrument. Edgewise meter is 0-100 micro-amp taut band movement with 2.5" scale. Accuracy complies with ANSI specs S1.4-1971. Selectable "fast" and "slow" response. Source impedance 620 ohms. Harmonic distortion less than 0.5% (0.1% typical) from 32 Hz to 8 kHz (C weighing with meter at full scale). Calibration adjustable with screwdriver from front of panel; requires use of an appropriate calibrated sound pressure source (sound level calibrator) coupled to the microphone. Operates from two Burgess 2U6 (9-volt) or equivalent batteries. Approximate battery life 50 hours. Operating temperature -10° to +50° C. Temperature coefficient of sensitivity -0.01 db/C at 6 db below full scale meter indication. Operating humidity 0 to 90% RH. Magnetic Field Influence: a 50 or 60 Hz field of 1 Oersted (80 A/m) will cause an indication of approx. 45 db with C weighing when the meter is oriented for maximum sensitivity to the field. Molded, high impact gray plastic case internally shielded with electronic circuit packaged on a flexible printed circuit board. Brass insert in underside of case with ¼-20 threaded hole for tripod mounting screws. Weight 1 pound. Overall size 3.63" wide, 5.38" high, 2.09" deep. Complete with batteries and operator's manual.

Cat. 29-885	Sound Level Meter	**Net $250.00**
Cat. 29-00575	Carrying Case	**Net $9.50**
Cat. 29-00576	Safety Wrist Strap	**Net $2.50**

SIMPSON SOUND LEVEL CALIBRATOR
MODEL 889

The Model 889 Simpson Sound Level Calibrator is used to calibrate the ceramic microphone on your Model 885 Simpson Sound Level Meter. This handy tester fits in the palm of your hand, is completely self-contained, features a single fumble-free control, and yet provides a precise 1000 Hz sound-pressure level. A built-in LED indicator checks for adequate battery voltage. Size: 5" long x 2.25" dia.

Cat. 29-889 Sound Level Calibrator **Net $95.00**



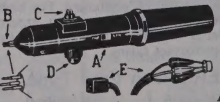
J-B-T VIBRATING REED
FREQUENCY METERS

Design incorporates a p manent magnet, a driving coil, and a set of pre-tuned reeds which brate at only one predetermined frequency. Readings are taken observing the reed action through calibrated windows in the me dial face. Overall accuracy ± 0.3%. Max. power consumption 1 wa Available in a molded rectangular case (3.5" wide x 3" high), or a round molded or round metal (3.5" dia.) case.

Cat. No.	Freq. Hz.	No. Reeds	Max. Volts	Case Material	N Ea
138-31-F	58-62	5	100-130	Rd. metal	**$29**
138-34-F	56-64	9	100-130	Rd. metal	**33**
138-33-F	380-420	9	100-130	Rd. metal	**40**
138-31-FX	58-62	5	100-130	Rd. molded	**27**
138-31-FX-7	57-63	7	100-130	Rd. molded	**30**
138-34-FX	56-64	9	100-130	Rd. molded	**31**
138-33-FX	380-420	9	100-130	Rd. molded	**39**
138-31-FG	58-62	5	100-130	Rectangular	**30**
138-31-FG-7	57-63	7	100-130	Rectangular	**32**
138-34-FG	56-64	9	100-130	Rectangular	**32**

Half bezels (3.83" wide x 2.27" high) are available for mount rectangular types behind up to .125" thick panels.

Cat. 138-13A-234	Black molded, with hardware	**Net $2**
Cat. 138-13A-239	Black metal, with hardware	**Net $2**



TELVAC SC-4 TESTS TRANSISTORS & DIODES WITHOUT DESOLDERING

A portable, easy-to-use, batt operated instrument which gives rapid "go-no go" evaluations semiconductors while they are still in the circuit. The slide swi (A) selects NPN or PNP settings. Three sharp, spring-loaded points (B) are spaced on TO-5 configuration. When they are pres into the socket terminals the pilot light (D) gives an indicatior cut-off conditions. When the push-button (C) is depressed the p light then indicates conduction characteristics. An adapter (E) is furnished for use in testing diodes and transistors out the circuit. The SC-4 case is made of unbreakable Rilsan plas is 9" long and 1¼" in diameter. Weight only 6 ounces. Powe from a 3-volt battery in the tester handle. Furnished comp with battery, adapter lead with socket and clips, and comp operating instructions.

Cat. 347-SC-4 Transistor Tester **Net $72.**

7-POSITION ADAPTER

Used for testing diodes "in circuit."

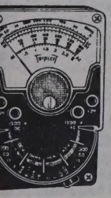
Cat. 347-1330 Diode Test Adapter **Net $16**

TRIPLETT V-O-MA METERS

RANGE COMPARISON CHART

following chart gives a direct comparison of the voltage, current and resistance ranges and the sensitivities of the entire line of lett V-O-M's, VTVM's. It will facilitate the selection of the one best suited to your needs. Unit appearance, size and special features iven below and on the following pages.

	Model No.	DC Voltages	DC Current	DC-V Drop	AC Voltages	Ohmmeter	Output dB
310	310	3-1200, 5 ranges @ 20KΩ/V, ±3% F.S.	600μA-600mA,4 ranges, ±3% F.S.	250 mV	3-1200, 5 ranges @ 5KΩ/V, ±4% F.S.	20K-20M, 4 ranges, ±3% F. S.	.....
3022	310C	3-600, 5 ranges @ 20KΩ/V, ±3% F.S.	600μA-600mA, 4 ranges, ±3% F. S.	250 mV	3-600, 5 ranges @ 15KΩ/V, ±4% F.S.	20K-20M, 4 ranges, ±3% F.S.	.....
3027	310-FET Type 1	.3-600, 6 ranges @ 10MΩ/V, ±3% F.S.	120μA-1.2mA, 2 ranges, ±3% F.S.	300 mV	3-600, 5 ranges @ 5KΩ/V, ±4% F.S.	5K-5000M, 4 ranges, ±3% F.S.	.....
3033	601 Type 2	.1-1000, 9 ranges @ 11MΩ/V, ±3% F.S.	10μA-.01A, 4 ranges, ±3% F.S.	100 mV	.01-1000, 11 ranges @ 10MΩ/V, ±3% F.S.	1K-1000M, 14 ranges, ±3% F.S.	-60 to +62
3037	603 Type 1	.3-1000, 8 ranges @ 11MΩ/V, ±3% F.S.	1mA-1A, 4 ranges, ±4% F.S.	316 mV	.3-1000, 8 ranges @ 11MΩ/V, ±3% F.S.	1K-1000M, 12 ranges, ±3% F.S.	-30 to +62
3030	630 Type 3	3-6000, 6 ranges @ 20KΩ/V, ±2% F.S.	60μA-12A, 5 ranges, ±2% F.S.	250 mV	3-6000, 6 ranges @ 5KΩ/V, ±3% F.S.	1K-100M, 4 ranges, ±2% F.S.	-20 to +51
3034	630A Type 3	3-6000, 6 ranges @ 20KΩ/V, ±1.5% F.S.	60μA-12A, 5 ranges, ±1.5% F.S.	250 mV	3-6000, 6 ranges @ 5KΩ/V, ±3% F.S.	1K-100M, 4 ranges, ±1.5% F.S.	-20 to +51
3038	630APL Type 4	2.5-5000, 7 ranges @ 20KΩ/V, ±1.5% F.S.	100μA-10A, 5 ranges, ±1.5% F.S.	250 mV	3-5000, 6 ranges @ 5KΩ/V, ±3% F.S.	1K-100M, 4 ranges, ±1.5% F.S.	-20 to +49
3120	630-APLK Type 3	2.5-5000, 7 ranges @ 20KΩ/V, ±1.5% F.S.	100μA-10A, 5 ranges, ±1.5% F.S.	250 mV	3-5000, 6 ranges @ 5KΩ/V, ±3% F.S.	1K-100M, 4 ranges, ±1.5% F.S.	-20 to +49
3042	630NA Type 3	.3-6000, 14 ranges @ 20K/10KΩ/V, ±1.5% F.S.	60μA-12A, 12 ranges, ±1.5% F.S.	120/ 240 mV	1.4-6000, 12 ranges @10K/5KΩ/V, ±3% F.S.	1K-100M, 6 ranges, ±1.5% F.S.	-20 to +51
3102	630NS Type 2	.3-1200, 13 ranges @ 200K/100KΩ/V, ± 1.5% F.S.	5μA-12A, 13 ranges ±1.5% F.S.	150/ 300 mV	1.5-1200, 10 ranges @ 20K/10KΩ/V, ±3% F.S.	1K-100M, 6 ranges, ±1.5% F.S.	-20 to +51
3050	630PL Type 4	2.5-5000, 7 ranges @ 20KΩ/V, ±2% F.S.	100μA-10A, 5 ranges, ±2% F.S.	250 mV	3-5000, 6 ranges @ 5KΩ/V, ±3% F.S.	1K-100M, 4 ranges, ±2% F.S.	-20 to +49
3055	630PLK Type 5	2.5-5000, 7 ranges @ 20KΩ/V, ±2% F.S.	100μA-10A, 5 ranges, ±2% F.S.	250 mV	3-5000, 6 ranges @ 5KΩ/V, ±3% F.S.	1K-100M, 4 ranges, ±2% F.S.	-20 +49
3066	666R Type 1	1 - 5000, 5 ranges @ 1KΩ/V, ±3% F.S.	10mA-1A, 3 ranges, ±3% F.S.	250 mV	10-5000, 5 ranges @ 1KΩ/V, ±4% F.S.	3K-3M, 3 ranges, ±3% F.S.	.....
3070	800 Type 2	.3-6000, 14 ranges @ 20K/10KΩ/V, ± 1.5% F.S.	60μA-12A, 12 ranges ±1.5% F.S.	120/ 240 mV	1.5-6000, 12 ranges @ 10K/5KΩ/V, ±3% F.S.	1K-100M, 6 ranges, ±1.5% F.S.	-20 to +51
3071	801 Type 2	.05-1500, 10 ranges @ 11MΩ/V, ±2% F.S.	5μA-1.5A, 12 ranges ±3% F.S.	45 mV	.005-1500, 12 ranges @ 10MΩ/V, ±3% F.S.	.1K-1000M, 15 ranges, ±3% F.S.	-70 to +68
3074	850 VTVM	.5-1500, 8 ranges @ 11MΩ/V, ±3% F.S.	....	....	1.5-1500, 7 ranges @ 830KΩ/V, ±3% F.S.	1K-1000M, 7 ranges, ±3% F.S.	.....
6028	6028 Type 1	.1-1000, 5 ranges @ 10MΩ/V, ±.25% F.S.	100μA-1A, 5 ranges ±.5% F.S.	100 mV	.1-1000, 5 ranges @ 10MΩ/V, ±.5% F.S.	.01K-10M, 7 ranges, ±.5% F.S.	.....
8035	8035 Type 2	.1-1000, 5 ranges @ 10MΩ/V, ±.1% F.S.	100μA-1A, 5 ranges ±.2% F.S.	100 mV	.1-1000, 5 ranges @ 10MΩ/V, ±.5% F.S.	.1K-10M, 6 ranges, ±.25% F.S.	.....

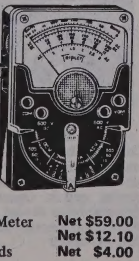


310 TYPE 2 V-O-MA-METER

A pocket-size unit which is popular with radio technicians, hobbyists, and industrial maintenance men. All ranges are on one enclosed selector switch. Provision for adding the accessory AC Clamp-On Ammeter Adapter. Self-shielding D'Arsonval meter movement not affected by external magnetic fields. Molded black case is 2.75" x 4.25" x 1.312". Shpg. wt. 2 lbs. Uses NEDA #910 and 220 batteries. With leads, batteries and instruction manual.

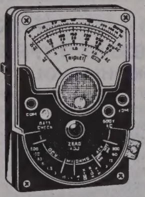
117-3018	Model 310 V-O-Ma-Meter	Net $46.00
117-10-1791	Leather Carrying Case	Net $12.10
117-79-153	Replacement Test Leads	Net $4.00

DEL 310-C TYPE 3 V-O-MA-METER



lar in size and appearance to Model 310 e but with slightly different ranges and itivity. All ranges on one enclosed se- or switch plus provision for adding the Clamp-On Ammeter Adapter for AC ent ranges. Uses rugged, self-shielding l suspension meter movement. Has meter rity reversing switch. Black molded case 75" x 4.25" x 1.312". Shipping wt. 2 Uses NEDA #910 and 220 batteries. plete with leads, batteries and instruc- s.

117-3022	Model 310-C V-O-Ma-Meter	Net $59.00
117-10-1791	Leather Carrying Case	Net $12.10
117-79-153	Replacement Test Leads	Net $4.00

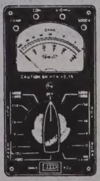


MODEL 310-FET TYPE 1
SOLID STATE V-O-MA-METER

Completely solid state.10meg.input resistance for transistor servicing. All ranges on one enclosed selector switch, plus provision for adding AC Clamp-On Ammeter Adapter. Uses rugged, self-shielding band suspension meter movement. Has zero center scale and polarity reversing switch. Case is 2.75" x 4.25" x 1.125". Wt. 2 lbs. Uses NEDA #1501, ASA #N batteries. Complete with batteries, test leads, and instructions.

Cat. 117-3027	Model 310-FET V-O-Ma-Meter	$78.00
Cat. 117-10-1791	Leather Carrying Case	Net $12.10
Cat. 117-79-153	Replacement Test Leads	Net $4.00

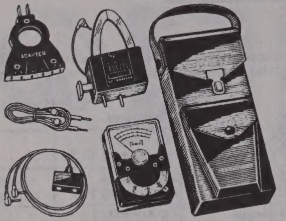
666-R TYPE 1 POCKET V-O-M



The ideal tester for industrial maintenance, hobbyists, electrical technicians or others who do not require the multiple ranges or higher sensitivity of the 310 Series V-O-M's. Recessed range knob permits easy insertion into tool kit or pocket. Self-shielded D'Arsonval meter. Pre-calibrated AC rectifier for easy replacement. Streamlined black case is 3.062" x 5.875" x 2.562" in size. Shpg. wt. 2 lbs. Uses NEDA #814, 13F batteries. With test leads, batteries and instructions.

Cat. 117-3066	Model 666-R V-O-Ma-Meter	Net $52.00
Cat. 117-5616	Leather Carrying Case	Net $10.10
Cat. 117-79-127	Replacement Test Leads	Net $4.00

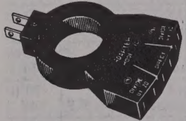
TRIPLETT VOLT-OHM-MA METERS



MODEL 100
CLAMP-ON AMMETER SETS

A complete package for use by industrial or electrical appliance service technicians. Each set consists of a V- O- Ma- Meter,' a Model 10 Clamp-On Ammeter Adapter, a Model 101 Line Separator, a Model 379 Leather Case and Model 311 Test Leads. Sets are available with the Model V-O-Ma-Meter as listed below.

Cat. 117-3014	With Model 310 V-O-Ma-Meter	**Net $82.00**
Cat. 117-3010	With Model 310-C V-O-Ma-Meter	**Net $92.00**
Cat. 117-3013	With Model 310-FET V-O-Ma-Meter	**Net $115.00**



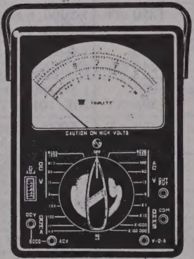
LINE SEPARATOR

Divides parallel cords for insertion of Clamp-On Ammeter Jaws. Increases ammeter sensitivity by 10X and 20X. For use up to 30 amps a-c.

Cat. 117-60218 101 **Net $8.40**

MODEL 630 TYPE 3
FUSED OHMMETER

For general electronic service and maintenance. Outstanding resistance range from 0.1 ohm to 100 megohms, with fuse-protected ohmmeter resistors. Has diode overload protection and suspension movement. Long meter scales for easy reading. Battery operated from NEDA #210 and #13F batteries. Furnished complete with test leads, alligator clips, batteries, and instruction manual.

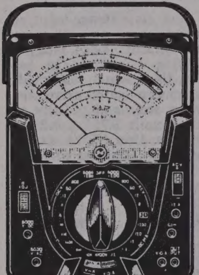


Cat. 117-3030	Model 630 V-O-Ma-Meter	**Net $69.00**
Cat. 117-10-823	639 Leather Carrying Case	**Net $15.30**
Cat. 117-10-921	639-P Padded Carrying Case	**Net $21.70**
Cat. 117-79-127	Replacement Test Leads	**Net $ 4.00**

LABORATORY MODEL 630-A TYPE 3

Similar in ranges to Model 630 above, but with better accuracy for laboratory use. Has bar-ring shielded, band suspension meter movement witn 4.5" mirrored scale and knife-edge pointer to eliminate parralax in reading. Fused ohmmeter resistors. Usable with frequencies through 500 kHz. Battery operated from NEDA #210 and #13F batteries. Complete with test leads, alligator clips, rubber feet, batteries and instructions. Shpg. wt. 5 lbs. Uses same accessory cases and test leads as Model 630.

Cat. 117-3034 Model 630-A Type 3 V-O-M **Net $79.00**



MODEL 630-NA TYPE 3
20K/10K OHMS/VOLT

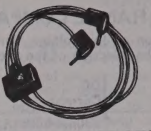
Rugged, self-shielding, band suspension meter with mirrored scale and knife-edge pointer. Temperature and frequency compensated. Diode meter protection. Fused ohmmeter resistors. D-C polarity reversing switch. Usable with frequencies through 500 kHz. Battery operated from NEDA #210 & #13F. Furnished complete with test leads, alligator clips, rubber feet, batteries and instruction manual. Uses same accessory cases and test leads as Model 630.

Cat. 117-3042 630-NA Type 3 **$103.00**

MODEL 630-NS TYPE 2
200K/100K OHMS/VOLT

Rugged, self-shielding, band suspension meter movement with mirror scale and knife-edge pointer, temperature and frequency compensation, and diode protection against overloads. Fused ohmmeter resistors. Usable to frequencies through 500 kHz. Similar in appearance to Model 630-NA above. Uses NEDA batteries #815 and #13F. Furnished complete with test leads, alligator clips, rubber feet, batteries and instruction manual. Uses same accessory cases and test leads as Model 630.

Cat. 117-3102 Model 630-NS V-O-Ma-Meter **Net $122.00**



TEST LEADS

Extension leads for using Clamp-Onadapte separately from V-O-Ma-Meter, or wit other Triplett V-O-M's listed under adapters.

Cat. 117-79-160	For 310 &10	**Net $4.0**
Cat. 117-79-161	For 310-C & 10-C	**Net $4.0**

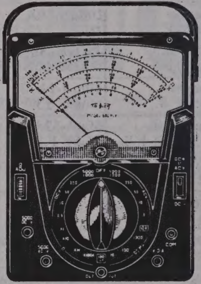
630 SERIES V-O-MA-METERS

There is a Model 630 V-O-Ma-Meter for every requirement in desig service and maintenance. Specific ranges are given in the com parison chart on the preceeding page. Illustrations and special fe tures are listed below. All models are in molded black phenoli cases with white lettering. All ranges are on a single, recesse selector switch. Models 630 and 630-A Type 2 have glass mete faces, and the case size (HWD) is 7.5" x 5.5" x 3.218". All othe models have unbreakable plastic meter faces and are in cases (HWD 7.5" x 5.5" x 3.343". Average shipping weight 5 pound

MODEL 10 CLAMP-ON AMMETER ADAPTER

Jaws open to clamp around a single conductor to read A-C amperes. Designed for use with 310 Series V-O-M's, but may also be used with Triplett Models 630, 630-A, 631, 630-PL, 630-APL, 630-APLK, 630-PLK, and 630-L by means of Model 611 leads. Ammeter ranges 0-6-12-30-60-120-300. Adapter locks in position on top of V-O-Ma-Meter. Shpg. wt. 1 lb.

Cat. 117-60211	For Model 310 V-O-Ma-Meter	**Net $21.0**
Cat. 117-60210	For Model 310-C V-O-Ma-Meter	**Net $21.0**



MODEL 630-PL TYPE A

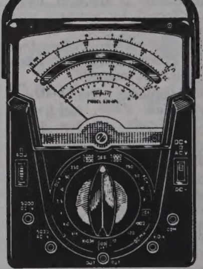
5" diode overload protected suspe sion meter with 27 ranges includi polarity switch. Battery operate from NEDA #210 & 13F batterie Complete with test leads, alligat clips, rubber feet and instructio manual. Uses the same accessor cases and test leads as Model 6

Cat. 117-3050 630-PL Type 2 **Net $73.0**

MODEL 630 PLK TYPE
COMPLETE V-O-M PROTECTION

Transistorized electronic switching circuit guards against ac dental burn-outs, damage to meter, and changes in accuracy. Fu protected ohmmeter resistors. Diode protected meter movemen Uses bar-ring, self-shielding D'Arsonval meter movement. Has D- polarity reversing switch. Provision for checking internal batte condition. Operates from NEDA #210 and #13F batteries. Co plete with test leads, alligator clips, batteries and instructions. Us same accessory cases and test leads as Model 630.

Cat. 117-3055 Model 630-PLK Type 3 V-O-M **$113.0**



MODEL 630-APL
HIGH ACCURACY MIRRORED SCALE

Uses self-shielding, band susp sion meter movement with m rored scale and knife-edge point Fuse protected ohmmeter re tors. Diode protected meter. D polarity reversing switch. Batte operated from #210 & #13 Complete with leads, batteries, structions. Uses same accessor as Model 630 at the left.

Cat. 117-3038 630-APL Type 3 **Net $83.**

MODEL 630-APLK

Complete burnout proof solid state protection, plus fused resist and diode meter protection. Uses self-shielding, band suspension m ter with mirrored scale and knife-edge pointer. Has D-C polarity versing switch. Operates from NEDA #210 & #13F. Similar appearance to Model 630-APL. Complete with leads, batteries a instruction manual. Same accessories as Model 630.

Cat. 117-3120 Model-630-APLK Type 2 **Net $123.**

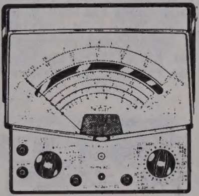
TRIPLETT V-O-MA METERS

EXTERNAL SHUNTS

r VOM Meters.

t.	Amps D-C	For Models		Net
7-91-247	630,630-A	0-30		$15.30
7-91-248	630,630-A	0-60		19.10
7-91-255	630,630-A	0-120		19.10
7-91-243	666-R,630-APL/APLK/PL/PLK		0-25	15.30
7-91-244	666-R,630-APL/APLK/PL/PLK		0-50	19.10
7-91-191	666-R,630-APL/APLK/PL/PLK		0-100	19.10
7-91-429	630-NA		0-15-30	20.40
7-91-430	630-NA		0-30-60	26.80
7-91-431	630-NA		0-60-120	26.80
7-91-570	630-NS		0-30	23.00
7-91-564	630-NS		0-60	16.70
7-91-565	630-NS		0-120	16.70
7-91-620	801		0-15	11.60

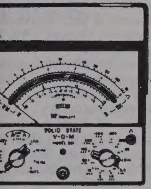
MODEL 800
DELUXE LAB TYPE
V-O-MA-METER



-ring shielded, band suspen- n meter with 6.95" long mir- ed scales and knife-edge point- . Diode protected against in- ntaneous overload. Fused nmeter resistors. Polarity re- sing selector switch. Temper- re and freq. compensated to quencies thru 100 kHz. Mold- black phenolic case is 7-1/2" x /4" x 3-7/8", has etched minum panel. Shpg. wt. 7 lbs. Furnished complete with NEDA 10 & #13F batteries, test leads and instructions.

117-3070	800 Type 2 V-O-Ma-Meter	**Net $134.00**
117-10-1669	Leather Carrying Case	**Net $28.10**
117-79-127	Replacement Test Leads	**Net $4.00**

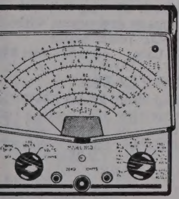
MODEL 801
HIGH SENSITIVITY
FET V-O-M
5 MV AC, 50 MV DC FS



73 measurement ranges including Slow-power resistance ranges that apply only 35 mV to the device under test. Large 8-inch glass front suspension type meter. Measures DC Volts from 0-50 mV to 0-1500 V in 10 ranges. Input resistance 11 megohms on all ranges. Accuracy ± 2%. Measures AC Volts from 0-5 mV 0-1500 V in 12 ranges. Input resistance 10 megohms on all ges. Frequency range 50 Hz to 50 KHz. Accuracy ± 3%. sures Decibels directly from -70 to +66 DB in 12 ranges. sures AC-DC Current from 0-5 μA to 0-1.5 Amps FS in 12 ges. Frequency range 50 Hz to 50 Khz. Accuracy 3% and 4%. ivolt drop 50 mV. Measures resistance from 0-1K (10 Ω ctr.) 0-1000 Megohms in 7 ranges. 8 low-power ohms ranges at nV. Power applied to device 30 Microwatts. Accruacy 3° of arc. ernally shielded from stray magnetic fields. Has battery condi- indicator. Over-voltage protected and fused. Operating range to 50° C. Polarity reversing—voltage and ohms. Furnished with lded probe with slide-switch for AC-DC-Ohms functions and ut cable, ground test lead, alligator clips, three 4½ and one 1½ batteries, and instruction manual. High impact black molded tic case is 8" x 7" x 5".

No.		
-3071	Model 801 FET V-O-Ma-Meter	**Net $231.00**
-10-2467	Carrying case	**Net $35.90**
-79-292	50 KV-DC high volt probe	**Net $29.20**
-79-289	20 V. 250 MHz RF probe	**Net $11.00**
-91-620	5 & 15 Amp shunt adapter	**Net $11.60**

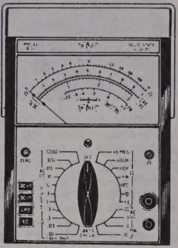
MODEL 850
ELECTRONIC
VOLT-OHMMETER



Long 7" easy to read scales. Input 11 megohms on all D-C voltage ranges. Bar-ring shielded meter movement with spring-backed jewel bearings. Reads A-C and Peak-to-Peak voltages. Frequency range 15 Hz to 3 mHz, or to 250 mHz with accessory 79-215 R-F Probe. Zero center scale for null measurements. Molded black nolic case (7-5/8" x 6-7/16" x 3-3/4") with etched aluminum el. Shpg. wt. 7 lbs. Operates from 115 v-ac, 50-60 Hz. Complete AC/DC/Ohms Probe and instructions.

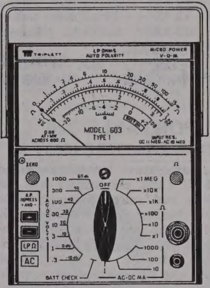
117-3074	850 Electronic V-O-Meter	**$113.00**
117-79-215	20 V-RF 250 mHz Probe	**Net $11.00**
117-10-1669	Leather Carrying Case	**Net $28.10**

SOLID STATE 601
V-O-MA-METER



F.E.T. amplifier circuit with diode protected, 4-1/2" bar-ring shielded, band suspension meter. Push button function selection. D-C polarity reversing switch. Fused ohmmeter resistors. Constant 11 megohm input resistance for both D-C and A-C volts. Zero center scale for null measurements. Provision for checking battery condition. Operates from NEDA #15A and "AA" cells. Usable to frequencies from 50 Hz to 50 kHz, or to 250 mHz with accessory 79-271 R-F probe. Molded black case (6-1/2" x 5-1/8" x 3-3/16") with etched aluminum panel. Shpg. wt. 5 lbs. Complete with test leads, alligator clips, batteries instruction manual and calibration instructions.

Cat. 117-3033	Solid State V-O-Ma-Meter	**Net $182.00**
Cat. 117-79-271	50 V-RF 250 mHz Probe	**Net $10.00**
Cat. 117-10B1793	Leather Carrying Case	**Net $17.80**

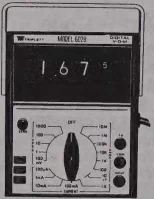


NEW MODEL 603
FET V.O.M.
WITH LOW POWER OHMS
& AUTO POLARITY

Triplett's Micro-Power circuitry draws only 10 micro-amps, provides battery life in excess of a year with carbon batteries. Low Power Ohms has 6 ranges with only 70 mV power source for in-circuit measurements without component damage. FET V-O-M with Auto-Polarity is convenient and time-saving always reads up-scale. The Model 603 reads DC/AC Volts from 0 to 1000 in 7 ranges. Input resistance 11 megs DC, 10 megs AC. Frequency range AC 20 Hz to 10 kHz to 100 v-ac. Accuracy ±3%F.S. Lower power ohms 0-1000MΩ in 6 ranges. Maximum power applied to device under test (low range) 123 μW. 10 ohm center scale on low (0-1K) range. Conventional ohms 0-1000MΩ in 6 ranges. Maximum power applied to device under test (low range) 57 mW. 10 ohms center scale on low (0-1K) range. AC & DC Milliamperes from 0 to 1000 in 4 ranges at 316 mV. Accuracy ±4% F.S. Decibels from -30 to +62 in 8 ranges. Model 603 uses a 20 μA suspension movement with a 4.5" scale. Case is molded high impact plastic. Overall size (HWD) 6.5" x 5.125" x 3.062". Wt. 2.5 lbs. Uses two 9V (NEDA 1604), and one 1.5V (D) cell. Complete with 48" leads, alligator clips, batteries and instruction manual.

Cat. 117-3037	Model 603 FET V.O.M.	**Net $165.00**
Cat. 117-10-1793	639-OS Leather Case	**Net $17.80**
Cat. 117-79-270	30 KV-DC HV Probe	**Net $30.60**
Cat. 117-79-264	250 mHz/20V RF Probe	**Net $11.00**

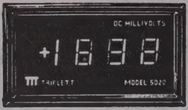
NEW MODEL 6028
DIGITAL V-O-M



A 2-3/4 digit V-O-M featuring 100% over-range (1995 max.), out-of-range indication, reverse polarity indication, and fused overload protection. Basic measuring circuit is a 100 mV 2-3/4 digit DC voltmeter. All ranges and functions are converted to a DC level in this range for measurement. The 6028 measures DC and AC Volts from 0-100 mV to 0-1000 volts in 5 ranges. Input impedance 9.404 megohms. Accuracy: DC .25% RDG ±1 digit to 1 volt, .35% RDG ±1 digit 10 to 1000 volts; AC .5% RDG ±1/2 digit, 40 Hz to 10 KHz, 100 mV to 100 volts, .75% RDG ±1/2 digit, 40 Hz to 500 Hz, at 1000 volts. Full scale step response: DC 2 sec.; AC 5 sec. Measures Resistance from 0-10 ohms LP to 10 megohms in 7 ranges. Accuracy .5% of reading ±1 digit on all ranges except 10 megs where it is 1% ±1/2 digit. Maximum test voltage 1 volt across resistor. Measures AC/DC Current from 0-100 μA to 1 Amp in 5 ranges. Accuracy: AC 1% of reading ±1/2 digit 40 Hz to 10 KHz; DC .5% of reading ±1/2 digit except on 1 Amp range where it is .75% of reading ±1/2 digit. Full scale step response AC 5 sec.; DC 2 sec. Voltage drop across input 100 mV DC/AC-RMS full scale. For 105-125 v-ac, 60 Hz operation.

Cat. 117-6028	Digital V-O-M	**Net $275.00**

TRIPLETT TEST EQUIPMENT



MODEL 4235-F
DIGITAL PANEL METERS

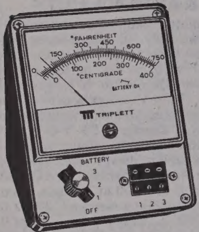
A 3½ digit digital panel meter for production testing, general testing, servicing and educational application. It employs a dual slope analog to digital conversion technique providing high noise refection, stability and accuracy for precise measurements. The seven bar flourescent readout provides a single plane display for wide angle ease of viewing. Incorporates Auto-Polarity over full reading range. Accuracy: voltage ± 0.1% of reading ± 1 digit; current ± 0.15% of reading ± 1 digit. Common mode rejection ratio 80: 1 db. Normal mode rejection ratio 30: 1 db (60 Hz). Operating range 0 to 40° C. Power requirements 105-125 v-ac 50-60 Hz. 2.0 watts. Overall size (HWD) 2.359" x 4.140" x 4.845". Wt. 1 lb. *100% overrange except on 1000 v. †Nominal.

D-C VOLTS

Cat. No. 117-F89-	Range* 0 to	Input Imp. †
13-01	19.99 mV	100 Meg Ω
13-02	1999.9 mV	1000 Meg Ω
13-03	1.999 V	1000 Meg Ω
13-04	19.99 V	10 Meg Ω
13-05	199.9 V	10 Meg Ω
13-06	1000 V	10 Meg Ω
Units Above Each,		Net $240.00
With BCD		Net $265.00

D-C CURRENT

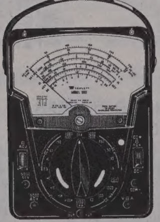
Cat. No. 117-F89-	Range* 0 to	Shunt Res.
13-07	1.999 μA	10K Ω
13-08	19.99 μA	10K Ω
13-09	199.9 μA	1K Ω
13-10	1.999 mA	100 Ω
13-11	19.99 mA	10 Ω
13-12	199.9 mA	1 Ω
13-13	1.999A	0.1 Ω
Units Above Each,		Net $240.00
With BCD		Net $265.00

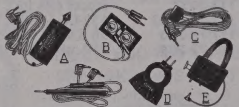


PORTABLE 320
TEMPERATURE METER

For temperature measurements in R & D Labs, electronics labs, in schools and universities, in automotive, heating, refrigeration and air conditioning and repair and in industrial production facilities. With switch selection of up to three probes, and battery condition check. Electrical compensation for ambient temperature. Sensor type thermocouple, Type J (Iron-Constantan) 5 ohms (±1%) resistance. Accuracy (at 77°F ambient) os ±2%F.S. Suspension type meter with 3 inch scale length. Molded black plastic case in (HWD) 4.375" x 3.875" x 4.25". Wt. 1 lb. Uses one 1.5v "C" cell. With 5 ft. probe, battery & instructions.

Cat. No.	Range	Net
117-3590	-150°F to +250°F, -100°C to +120°C	$62.00
117-3591	0°F to +500°F, -20°C to +250°C	62.00
117-3592	0°F to +750°F, -20°C to +400°C	62.00
117-3593	0°F to +1000°F, -20°C to +540°C	62.00
117-79-310	Additional Probe	9.40

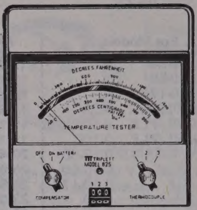




NEW MODEL 990
INDUSTRIAL MAINTENANCE ANALYZER
MEASURES AC/DC VOLTS, AC/DC CURRENT, OHMS, DECIBELS RPM & DEGREES FAHRENHEIT

For every industrial maintenance requirement. Basic instrument is a Model 900 V-O-M which measures DC Volts from 0-250 mV to 0-5000 volts in 7 ranges at 10,000 or 20,000 ohms/volt, AC.Volts from 0-3 to 0-5000 in 6 ranges at 5,000 ohms/volt, DC Current from 0-100 μA to 0-10 amps in 5 ranges, plus 0-100 amps with external shunt (B), AC Current from 0-6 to 0-300 amps in 6 ranges with Model 10 (E) Clamp-On Adapter, Resistances from 0-1000 ohms to 0-100 meghoms in 4 ranges, Temperatures from -50°F to +100°F and from +40°F to +300°F with Temperature Probe (C), Rotational Speed (RPM) from 0-500 and 0-5000 rpm with Tachometer Generator (A), and Decibels from -20 to +49 db. Model 990 includes the Model 900 V-O-M, the Tachometer Generator (A), the External DC Shunt (B), the Temperature Probe (C), the Line Separator (D), the Clamp-On AC Ammeter Adapter (E), and the necessary test leads, test prods, etc., all in a foam-lined, leatherette covered carrying case with nesting pockets for each component.

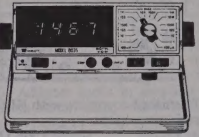
Cat. 117-990 Industrial Analyzer **Net $243.00**



NEW MODEL 825
TEMPERATURE METE
-50°F TO +1500°F & -50°C TO +800°C

For laboratory or production use metal, heat treating, chemical, r ber, plastic or ceramics industries any use requiring temperature m surement up to 1500°F. Case molded high impact black pal with glass window. Suspension ty meter with mirror scale and approx. 7.5 inch scale length. Ran -50°F to +1500°F and -50°C to +800°C. Sensor type therr couple, type K (Chromel-Alumel), 5Ω (±1%) resistance. Electr compensation to 77°F. Accuracy ±1.125% F.S. Selector switch three inputs and battery check. Case size (HWD) 6.75" x 7.625 4.25". Wt. 4.5 lbs. Uses one 1.5 v-dc "D" cell. Furnished with ft. thermocouple probe, battery and instruction manual.

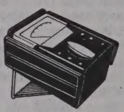
Cat. 117-3119 Model 825 Temperature Meter **Net$104.**
Cat. 117-311 Additional Probe **Net $4**



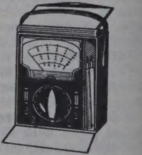
NEW MODEL 803
DIGITAL V-O-M

A 3-1/2 digit V-O-M featuri automatic polarity display, 10 overrange (1999 counts), out- range display blanking, and fu overload protection. Basic i strument is a 100 mV 3-1/2 d DC voltmeter utilizing a chopper stabilized amplifier for acc acy, long term stability and high input impedance. All ranges functions are converted to a DC level by this circuit. The Mo 8035 measures DC Volts from 0-0.1 to 1000 in 5 ranges, accur ±1% RDG ±1 digit, full scale step response 2 sec. Measures Volts (RMS) from 0-0.1 to 1000 in 5 ranges, average ±4% R ±1 digit to 20 KHz. AC/DC Volts input impedance 10 megoh Measures Resistances from 0-100 ohms to 100K ohms accur ±.25% RDG ±1 digit, from 0-1 meg accuracy ±.5% RDG ±1 di from 0-10 megs accuracy ±1% RDG ±1 digit. Measures AC/ Current from 0-100 μA to 100 mA in 5 ranges accuracy: DC u 100 mA ±.25% RDG ±1 digit, 1000 mA ±.4% RDG ±1 digit; ±.5% RDG ±1 digit 40 Hz to 20 KHz. Readout on 4 fluoresc tubes with movable decimal point. 3 least significant figures bl out for out-of-range indication. Power requirements 105-125 v 50-60 Hz.

Cat. 117-8035 Digital V-O-M **Net $385.**


639-N

639/639-P


639-OS

LEATHER CARRYING CASES

Models 639-N, 639, 639-P and 639-OS are for use with Triplett dels 600, 601, 630, 630-A, 630-PL, 630-APL, 630-NA, 630-M, 6 NS, 630-L, 630-PLK, and 630-APLK.

MODEL 639-N CASE

Vertically divided cover flaps snap back allowing full view of tester scales and permitting full access to instrument without moving it from case. Includes 255-A-OP Tester Stand.

Cat. 117-10-1189 Model 639-N Case **Net $15**

MODELS 639/639-P CASES

Model 639 Case has a leather carrying strap. Model 639-P Cas the same but is lined with a protective 3/8" sponge rub

Cat. 117-10-823 Model 639 Case **Net $15**
Cat. 117-10-921 639-P Case with Rubber Lining **Net $21**

MODEL 639-OS CASE

Horizontal flaps open to permit full use of tester without remo it from the case. Has storage space for test leads.

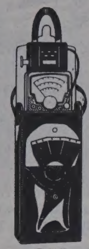
Cat. 117-10B-1793 Model 639-OS Case **Net $17**

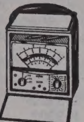
MODEL 859-OP CASE

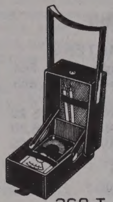
For Models 800 or 850. Lined with sponge rubber. Flaps ope permit use of tester in the case. Built-in stand on back of c

Cat. 117-10-1669 Model 859-OP Case **Net $28**

TRIPLETT







COMBINATION MODEL 379

or Model 310 or 310-C V-O-M in combination with Model 10 or -C Clamp-On Ammeter Adapter. Pouch for Model 101 Line Separator.

t. 117-1456 Model 379 Case Only **Net $9.70**

MODEL 369-S CASE

or Model 310 or 310-C V-O-M. Removeable shoulder strap. Case ap folds back to become angle stand. Retractable hook for hang- g from nail, pipe, etc., to free both hands. Space for test leads. ned with soft, shock absorbent material.

t. 117-10-1791 Model 369-S Case **Net $12.10**

MODEL 369 CASE

or Model 310 or 310-C V-O-M. Trouser belt slips through loop on ck of the case for out-of-the-way carrying.

t. 117-10-1258 Model 369 Case **Net $5.10**

MODEL 369-T CASE

or Model 310 or 310-C V-O-M. Case has neck-strap, opens to per- it use of tester without removing it from the case.

t. 117-10B-1608 Model 369-T Case **Net $11.60**

MODEL 669 CASE

or Model 666-R V-O-M. Similar to the Model 639 Case above.

t. 117-5616 Model 669 Case **Net $10.10**

MODEL 669-OS CASE

or Model 666-R V-O-M. Case flaps open to permit the use of tester thout removal from case. Built-in stand on back.

t. 117-10B-1792 Model 669-OS Case **Net $11.00**

TESTER STAND

lds V-O-M at approximately 45° angle for easy viewing. For use th Models 630, 630-A, 630-PL, 630-APL, 630-NA, 630-NS, 630- K, 630-APLK, 631, 630-M or 630-L. Shpg. wt. 1 lb.

t. 117-255-A-35 Stand Only **Net $2.50**

REPLACEMENT TEST LEADS

t.	For Use With Models	Net
7-79-127	630, 630-A, 630-PL, 630-APL, 630-PLK, 631, 666-R, 630-NA, 630-M, 630-NS, 630-L, 800	$4.00
7-79-153	850	4.00

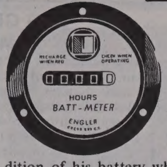
HIGH VOLTAGE PROBES

.	Range	For Models	Net
-79-70	0-30 KV-DC	630,630-A	$21.70
-79-71	0-30- KV-AC	630,630-A	21.70
-79-152	0-60 KV-AC	630,630-A	21.70
-79-83	0-10 KV-DC	630-PL,630-APL,630-PLK	21.70
-79-130	0-25 KV-DC	630-PL,630-APL,630-PLK	21.70
-79-166	0-25 KV-AC	630-PL,630-APL,630-PLK	21.70
-79-152	0-30 KV-DC	630-NA, 800	21.70
-79-71	0-30- KV-AC	630-NA, 800	21.70
-79-152	0-60 KV-AC	630-NA, 800	21.70
-79-229	0-6 KV-DC	630-NS	21.70
-79-230	0-6 KV-AC	630-NS	21.70
-79-152	0-30 KV-AC	630-NS	21.70
-79-270	0-30 KV-DC	601	30.60

ENGLER

BATT-METER

FOR BATTERY CONDITION & OPERATION TIMING

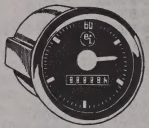


For use on battery operated equipment such as fork lifts, golf carts, construction equipment, etc. Helps eliminate being stalled in distant portion of a factory or yard, assures golfers of getting back to club house. Operator can see the condition of his battery while the vehicle is moving or lifting. When the pointer of the meter is in the white region batteries are in good condition. When in the red re-charging is necessary. Flange diameter 2.85". Mtg. hole diameter 2.53". Overall depth 3-3/16". Non-resettable.

Cat. No.	Battery Voltage	Mtg. Type	Ea. 1-3	4-24	25-49
506-B12N5	12 V-DC	3-Hole Mtg.	$29.95	$27.00	$25.40
506-B12N0	12 V-DC	Stirrup Mtg.	29.95	27.00	25.40

VIBRATION HOUR METER

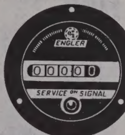
NON-ELECTRIC



Time mechanisms which register hours when subjected to vibrations, similar to a self-winding watch. When meter is placed on a machine that vibrates only when operating the meter will totalize how many hours the machine has been operating. Installation play from horizontal to a 45 degree tilt. Operating frequency range 12 to 35 Hz. For long life amplitude should not exceed 1/8". Accuracy ±2.5%. Sweep hand makes one revolution in 60 minutes. Counts to 99,999 hours and resets to zero. Flange diameter 2-5/8". Mtg. hole 2-3/8" dia. Overall depth 3-1/32".

Cat. No.	Mtg. Type	Ea. 1-3	4-24	25-49
506-V100H	Horizontal to 45°	$28.25	$25.40	$24.00

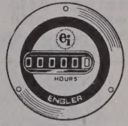
SERVICE-ON-SIGNAL HOUR METER



"LIGHTS UP" when it is time for maintenance. Eliminates expensive time-consuming written records. Light goes on at predetermined settings, and the meter continues to totalize time until the next time period has elapsed. It continues to do this until 99,999 hours have elapsed. Available factory per-set to increments of 1, 10, 100, or 1,000. Prices and delivery on request. Mtg. hole diameter 2-1/8". Overall depth 2-3/8". For 115 v-ac, 60 Hz operation.

Cat. No.	Pre-Set Hours	Ea. 1-3	4-24	25-49
506-SOS-100-10-GG	Pre-Set 100	$36.50	$32.80	$31.00

A-C HOUR METER

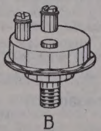


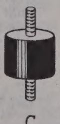
For use wherever it is necessary to keep a record of the operating time of electrical or electronic equipment. Recognized under the component program of Underwriters' Laboratories, Inc., and C.S.A. listed. New, self-extinguishing plastic case. Large white numbers on black background. Flange diameter 2.844". Mtg. hole diameter 2.440". Overall depth 2.275". Connections on terminal block. For 115 v-ac 60 Hz operation.

Cat. No.	Running Time	Ea. 1-3	4-24	25-49
506-200-10N-G7	9,999.9 hours	$11.50	$10.35	$9.80

MOUNTING HARDWARE

A


B


C

For use with the counters listed above, and with all other ENGLER counting devices. Fig. A is a ring-type vibration dampner for use with standard, round cased counters. Outside diameter 3-7/8" diameter. Fig. B is a pressure switch set to operate at 4 pounds, but will withstand up to 150 pounds pressure. Fig. C is a button-type vibration dampner.

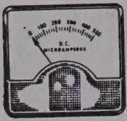
Cat. No.	See Fig.	Unit Description	Ea. 1-3	4-24	25-49
506-VD	A	Vibration Dampner	$4.50	$4.05	$3.80
506-PS	B	Pressure Switch	4.50	4.05	3.80
506-VB	C	Vibration Buttons (pr.)	1.60	1.45	1.35

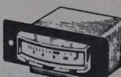
Other ENGLER units are available for use as speedohmeters, tachometers, revolution counters, etc. Complete literature on request.

SHURITE PANEL METERS

FOR GENERAL USE

ACCURACY WITHIN 5%





Attractive, rugged and dependable instruments which are ideal for use in constructing protypes of electronic or electrical equipment. They have been used in Amateur Radio and Citizen's Band units, battery chargers, burglar and fire alarm systems, emergency lighting systems, met locaters and magnetism detectors, photocopying machines, school and training panels, traffic control system tuning circuits for stereo receivers, level indicators for disc and tape recorders, volt ohm-milliammeter kits, voltage regulators, and many others. Model 850 (shown at the lef is housed in an attractive plastic case. Flange size is 2.531" wide x 2.312" high. Barr diameter is 2.015", depth 0.718". Overall depth (including terminals) 1.437". Edgewi model 350 (shown at the right) has a crystal clear polystyrene front, with black cas Panel cutout size is 1.656" wide x .531 high. Mounting screws on 1.968" center Standard Models 850 and 350 shown ha 0 adjustment. For non-magnetic panc

MODEL 850

D-C MILLIAMMETERS

Cat. No.	Full Range	Approx. Ohms	Net Each
9-8902Z	0-0.5	1,000	**$5.30**
9-8336A	0-1	1,000	**4.85**
9-8335Z	0-2	500	**4.85**
9-8301Z	0-3	4,460	**4.05**
9-8302Z	0-5	3.740	**3.80**
9-8303Z	0-10	1,380	**3.65**
9-8304Z	0-15	600	**3.65**
9-8305Z	0-25	230	**3.65**
9-8306Z	0-50	58	**3.65**
9-8307Z	0-100	14.7	**3.65**
9-8308Z	0-150	7.0	**3.65**
9-8309Z	0-200	4.7	**3.65**
9-8310Z	0-300	1.7	**3.65**
9-8311Z	0-400	.84	**3.65**
9-8312Z	0-500	.70	**3.65**

D-C AMMETERS

9-8201Z	0-1	.105	**$3.65**
9-8202Z	0-3	.02 max.	**3.65**
9-8203Z	0-5	.02 max.	**3.65**
9-8204Z	0-8	.02 max.	**3.65**
9-8205Z	0-10	.02 max.	**3.65**
9-8206Z	0-15	.02 max.	**3.65**
9-8207Z	0-25	.02 max.	**4.05**
9-8208Z	0-50	.02 max.	**4.05**
9-8213Z	10-0-10	.02 max.	**4.05**
9-8214Z	20-0-20	.02 max.	**4.05**
9-8215Z	30-0-30	.02 max.	**4.05**
9-8216Z	50-0-50	.02 max.	**4.25**

D-C VOLTMETERS

9-8102Z	0-3	10	**$3.65**
9-8104Z	0-5	300	**3.65**
9-8106Z	0-8	600	**3.65**
9-8107Z	0-10	880	**3.65**
9-8108Z	0-15	2,370	**3.65**
9-8121Z	0-20	3,500	**3.65**
9-8110Z	0-25	5,000	**4.05**
9-8111Z	0-50	10,000	**4.35**
9-8116Z	0-150	30,000	**4.35**
9-8117Z	0-300	60,000	**4.55**
9-8118Z	0-500	100,000	**4.75**

MODEL 850

A- C MILLIAMMETERS

Cat. No.	Full Range	Approx. Ohms	Net Each
9-8607Z	0-10	4,800	**$5.20**
9-8601Z	0-25	750	**5.20**
9-8602Z	0-50	150	**5.20**
9-8603Z	0-100	37	**5.20**
9-8604Z	0-250	5.4	**5.20**
9-8605Z	0-500	1.34	**5.20**

A-C AMMETERS

9-8501Z	0-1	.42 max.	**$5.00**
9-8502Z	0-3	.072 max.	**5.00**
9-8503Z	0-5	.041 max.	**5.00**
9-8504Z	0-10	.02 max.	**5.00**
9-8508Z	0-15	.02 max.	**5.00**
9-8505Z	0-30	.02 max.	**5.10**
9-8506Z	0-50	.02 max.	**5.35**

A-C VOLTMETERS

9-8403Z	0-10	27	**$5.05**
9-8404Z	0-15	35	**5.05**
9-8412Z	0-25	53	**5.05**
9-8405Z	0-50	96	**5.05**
9-8406Z	0-150	100	**5.30**
9-8407Z	0-300	100	**5.55**
9-8414Z	0-500	100	**6.15**

RESISTANCE METER

9-8701Z 0-10,000Ω 4.5 v. **$4.05**
Requires three 1.5 v. flashlight cells.

VU METER

9-8801Z -20 to +3 VU 1,400 **$6.00**

S METER

9-8333Z 0 to 40 db 1,000 **$4.25**

MODEL 350

D-C MILLIAMMETERS

Cat. No.	Full Range	Approx. Ohms	N Ea
9-3300	0-1	500	**$4.**
9-3302	0-5	100	**3.**
9-3303	0-10	50	**3.**
9-3305	0-25	20	**3.**
9-3306	0-50	10	**3.**
9-3307	0-100	5	**3.**
9-3309	0-200	2.5	**3.**
9-3310	0-300	1.7	**3.**
9-3312	0-500	1.0	**3.**

D-C AMMETERS

9-3202	0-3	.02 max.	**$3.**
9-3205	0-10	.02 max.	**3.**
9-3206	0-15	.02 max.	**3.**
9-3213	10-0-10	.02 max.	**3.**

D-C VOLTMETERS

9-3104	0-5	1,000	**$3.**
9-3107	0-10	2,000	**3.**
9-3108	0-15	4,000	**3.**

A-C VOLTMETERS

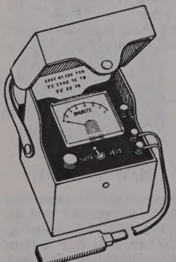
9-3404	0-15	1,500	**$4**
9-3406	0-150	48,000	**4**

VU METER

9-3801 -20 to +3 VU 1,400 **$5**

S METER

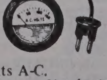
9-3333Z 0-40 db 1,000 **$4**



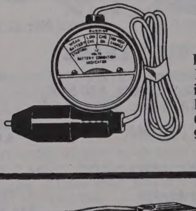
COLD ZONE TESTER

For checking the temperatures of refrigerators, deep freezers, air conditioners, and other cooling units. Place the flat, moisture-sealed resistance bulb inside the cooling unit and close the door on the flat, 8-ft. polyethylene lead. Allow the bulb to stabilize and get a temperature reading from -40° to +120° F. 2.125" meter scale readable to ± 2%. Complete with 8-ft. lead and bulb, and 7.5 v. battery. Case size 5" x 5" x 4.5".
Cat. 9-8380-RT **Net $24.70**

A-C LINE VOLTAGE TESTER

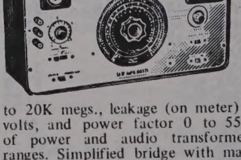


For checking A-C line voltage with TV set or appliance both off and on to determine any possible voltage drop due to inadequate wiring or circuit overloading. Meter reads 0-150 volts A-C.
Cat. 9-5406-LT Line Voltage Tester **Net $5.20**



AUTO BATTERY METER

Plugs into cigar lighter. Indic 12-volt battery condition when st ing and running. Also indicates high or too low charging r
Cat. 9-4153 Each **Net $5**

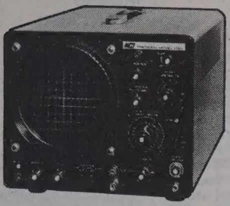


SPRAGUE TO-6 TEL-OMIKE®

CAPACITOR TESTE

For testing all capacitors exc low voltage transistor ty Measures capacity 1 mmfd 2000 mfd., insulation resist to 20K megs., leakage (on meter) 0-6/60 ma-dc from 0 to volts, and power factor 0 to 55%. Also measures turns r of power and audio transformers. Push-button selection ranges. Simplified bridge with magic-eye null indicator. Ca 14-5/8" x 6-1/8" x 8-7/8" high. Wt. 12.5 lbs.
Cat. 291-TO-6 Capacitor Analyzer **Net $149**

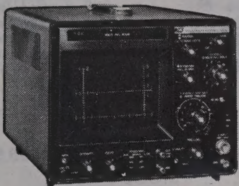
B & K PRECISION EQUIPMENT



MODEL 1460
TRIGGERED SWEEP DELUXE SCOPE

Fully automatic triggered sweep. View the entire composite TV signal or any portion thereof, including the VITS and "back porch" of the horizontal sync pulse-all in perfect sync. Special sync separator circuit operates in all 19 triggered sweep positions; switch back and forth from 2 horizontal lines to 2 vertical fields—with no other adjustments. DC to 10 MHz bandwidth; 10 millivolts/cm sensitivity displays smallest signal levels. DC amplifier. Has 1, 2, 5 steps on calibrated vertical attenuator. Front-panel Vectorscope capability. Mylar vector overlay and tilt stand. Size: 9 x 10 x 17". For 105-125 VAC, 50-60Hz Wt. 27 lbs.

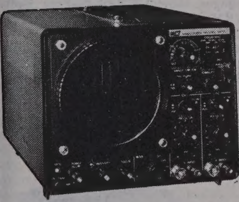
Cat. 461-1460	Triggered Sweep Scope	**Net $399.95**
Cat. 461-PR-16	10:1 Direct Probe	**14.95**
Cat. 461-PR-20	Same, with spring-loaded tip	**19.95**



MODEL 1465
TRIGGERED SWEEP

Cali-brain – another B&K first! Special art screen has 2 scales, one on each side; selecting your vertical attenuator range automatically lights up the correct scale and produces a digital readout of full scale volts above the screen. To read peak-to-peak volts faster and more accurately, here's all you do: (1) Get pattern on screen; (2) Pull out cali-brain knob (vertical position control); this collapses the horizontal sweep and shifts the resulting vertical line to the proper scale; (3) Position the compressed waveform on the base line; (4) Read the peak-to-peak volts directly off the screen! 100% solid state. 10 MHz bandwidth, triggered sweep, automatic sync. With tilt stand. 9 x 10 x 17". For 105-125 VAC, 50-60 Hz, Wt. 27 lbs.

Cat. 461-1465	Triggered Sweep Scope	**Net $359.95**
Cat. 461-PR-16	10:1 Direct Probe	**14.95**
Cat. 461-PR-20	Same, with spring-loaded tip	**19.95**



MODEL 1470
DUAL-TRACE SCOPE

Features dual display of waveforms, their sum or difference, for fast easy comparison, etc. Full automatic or triggered sweep. DC to 10 MHz bandwidth; 10 millivolts/cm to 20 volts/cm vertical sensitivity, divided into 11 calibrated ranges. Operating modes: Ch. 1 only; Ch. 2 only; alternate; chopping (140 KHz); Ch. 2 invert or normal (push-push-switch). TV sync solid state. With Mylar Vector overlay and tilt stand. Size: 9 x 10 x 17". For 105-125 VAC, 50-60 Hz. 3-wire line cord. Wt., 28 lbs.

Cat. 461-1470	Triggered Sweep Scope	**Net $499.95**
Cat. 461-PR-16	10:1 Direct Probe	**14.95**
Cat. 461-PR-20	Same, with spring-loaded tip	**19.95**

MODEL 747
DYNAMIC Gm TUBE TESTER

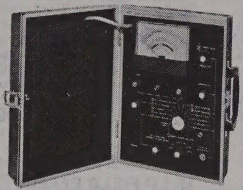
Tests all tubes with true dynamic mutual conductance test. Has (1) "Jet-Check" section for testing tubes and most often used in radio and TV; (2) Programmed section for less popular tube types. Thus, the 747 is truly obsolescent-proof, and offers the positive reliability of the dynamic Gm test in both sections. Tests emission of non-amplifying tubes such as diodes and rectifiers; checks high-voltage egulators with effective dynamic test. Checks for shorts, leakage, grid emission, gas and life expectancy. 100% solid state. 5-5/16 x 20½ x 11½" deep. For 105-125 VAC, 50-60 Hz. Wt., 12 lbs.

Cat. 461-747	Dynamic Gm Tube Tester	**Net $249.95**

MODEL 162
TRANSISTOR F.E.T. TESTER

Reliable, fast, low-cost way to check transistors and F.E.T.'s in-and out-of-circuit. Easy to operate. Go-No Go test tells you instantly if device is defective. Tests: Diodes, Unijunctions, SCR's, Triacs, etc. Checks gates of dual-gate F.E.T.'s separately. Measures ICBO/ICES/ICEO/ IGSS/Beta/Gm. 4½" meter. Size 7¼x9x4". With batteries and leads. Shpg. wt., 6-¾ lbs.

Cat. 461-162	Transistor/F.E.T. Checker	**Net $99.95**



MODEL 466
DELUX CRT TESTER-REJUVENATOR

Professional quality B&W and color CRT Tester with the latest advanced features. Checks Trinitrons, GE 11" tubes. Separate G-3 control for each color gun; monitored rejuvenation—see precisely what you are doing; "Super-Rejuvenate" function for restoring otherwise worthless tubes; 4½" meter; continuously variable and metered heater, G-1, G-2 voltages; monitors heater at the CRT pins. Tests CRT's for opens, shorts, leakages; checks cathode emissions; evaluates color gun tracking. 13½ x 9½ x 5¼". For 105-125 VAC, 50-60 Hz. Wt., 8 lbs.

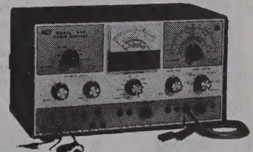
Cat. 461-466	Delux CRT Tester-Rejuvenator	**Net $129.95**

MODEL 277, SOLID-STATE ELECTRONIC MULTIMETER

Has 7 low-power and 7 high-power ohm ranges—variable when checking ohms in semiconductor or IC circuits. 36 additional ranges for measuring AC and DC volts, DC current and dB. Has 1 microamp DC current range for sensitive semiconductor leakage testing. Also has .1 volt AC/DC volt scales, for measuring transistor bias. 100% solid-state. FET input, current resistance and circuits overload protected. Size, 7½ x 7-7/8 x 3-5/8". With PR-21 probe; Has switchable 100K ohm isolating resistor. Less batteries. Shipping wt. 5 lbs.

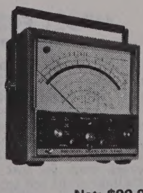
Cat. 461-277	Solid-State Electronic Multimeter	**Net $89.95**

MODEL 970
TRANSISTOR EQUIPMENT ANALYST



Model 970 has the ability to check transistors without taking them out of the circuit; Reads Bets directly on meter scale and also tests for leakage current. Outputs: 250-2000KHz. (AM); 10-11.4 MHz, (FM)-all with vernier tuning. Also, 400 Hz audio signal or modulation. AM modulation not less than 30%; FM deviation, not less than 70KHz. Audio output level adjustable-even suitable for speaker tests. Size, 8½x15½x9". For 105-125 VAC, 60 Hz. Shpg. wt., 26 lbs.

Cat. 461-970	Transistor Equipment Analyst	**Net. $229.95**

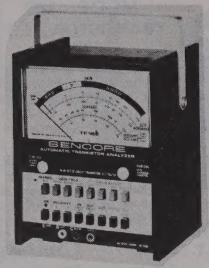


MODEL 177
30-RANGE VTVM

Highly versatile, rugged, "old-stand-by" vacuum tube voltmeter, with built-in DC supply—no ohms battery required. Has 30 ranges; DC/AC/RMS volts; resistance. Special calibration on low AC ranges. Large 7" mirrored, 100 microamp meter. Input resistance, 11 megaohms. Accuracy 3% on DC, 5% on AC. Supplied with B & K PR-43 high-impact Cycolac, DC/ AC/Ohms test probe, with switch. 7-1/8 x 7¼ x 3-5/8". Wt. 81 lbs.

Cat. 461-177	30 Range VTVM	**Net: $99.95**
Cat. 461-AV-1A	VHF Probe	**7.95**
Cat. 461-AV-2A	60,000 volt probe	**14.95**

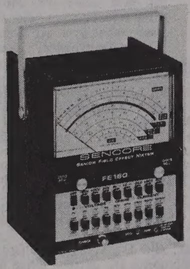
SENCORE TEST INSTRUMENTS



TF166
AUTOMATIC TRANSISTOR ANALYZER

All new automatic transistor analyzer is a combination of speedy solid state trouble shooter and a high quality transistor analyzer. Simply push-in buttons labled Hi Freq., Low Freq., or Field effect for checking RF transistors, low, medium or high power transistors and FET's. Calibrated scale indicates gain of up to 500 (Beta) and mutual conductance (Gm) of up to 25K micromhos. AC signals are used to protect the components and tester too. Polarity N and P buttons can be pushed in any time without causing any damage. Calibrated scales in milliamps, microamps, and micromhos for Icbo, Idss, Igss and Gm provide accurate design measurements. Separate switch for DC out of circuit insures 100% accuracy. Dimensions: 9" x 7½" x 6". Weight: 8½ lbs.

Cat. 444-TF166 Automatic Transistor Analyzer **Net $190.00**



FE160
HI-LO FIELD EFFECT MULTIMETER

Model FE-160 can measure resistance in circuit in solid state devices. Low power ohms using .08 volts to make in-circuit resistance measurements accurately. High power ohms for routine resistance measurements and to check front-to-back ratios of diodes. One-tenth volt full scale sensitivity on both AC and DC voltage. Protected to 1000 times overload. Multimeter resistors protected by .6 amp fuse. DC Volts: 10 ranges .1 to 3000 volts full scale. Zero Center: 10 ranges .05-1500 volts. AC Voltage: 9 ranges .1-1000 volts. AC Peak-to-Peak: 9 ranges .28-2800 volts. DC Current: 10 ranges 30 microamps to 3 amps full scale. Hi Power ohms: 8 ranges 600 ohms to 6000 megohms. Lo Power ohms: 7 ranges 600 ohms to 600 megohms. Large 7 inch meter in bench case. AC operated. Size: 9" x 7½" x 6".

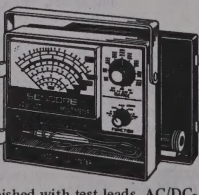
Cat. 444-FE160 Deluxe Hi-Lo Meter **Net $190.00**

PS148
OSCILLOSCOPE/ VECTORSCOPE

Model PS148 is a dual purpose Oscilloscope/Vectorscope. Wide band response of 10 Hz to 5.2 MHz ±1 dB at a sensitivity of 17 mV RMS per inch. High input impedance of 27 megohms shunted by 11 pf with the low cap probe. Voltage rating of the probe is 7000 volts to prevent accidental damage to the scope if the wrong point is contacted. Direct read out of the peak to peak voltage with two simple front panel controls. Converts to a vectorscope with the flip of a switch. Positive sync and full range of horizontal sweep frequencies from 5 Hz to over 500 KHz. A service scope with a flat face 5" CRT. Size only 11" x 9" x 15½". Weight: 22 lbs.

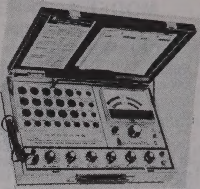
Cat. 444-PS148 Oscilloscope/Vectorscope **Net $269.50**

MODEL FE20
HI-LO 6" MULTIMETER



Incorporates all of the features and ranges of the Model FE21 above, but has a larger, easy-to-read 6" meter, is housed in a protective carrying case with a slip-hinge cover which disconnects battery when cover is closed, and storage space for test leads, AC/DC-Ohms probe and small tools. Furnished with test leads, AC/DC-Ohms Probe and 30 KV-DC probe.

Cat. 444-FE20 Hi-Lo 6" FET Multimeter **Net $140.00**



MU150
CONTINENTAL II

Continental II is the worlds only
tube analyzer. Checks the tube fo
Gm with a 5000 hertz square wav
for a true Gm test. Checks th
tube for full load cathode emission
100 megohm grid leakage test t
pick out the troublesome tube
encountered in your daily routine
True shorts picked out with th
famous Sencore stethoscopic short
test. Housed in a handsome steel attache case. Size: 17" x 11"
14". Weight: 18 lbs.

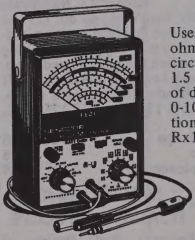
Cat. 444-MU150 Continental II **Net $269.5**

CG159
COLOR GENERATOR

The new king in color ba
generator features perma
lock circuitry for rock soli
patterns and "painted" do
on the screen. Smaller line
and dots for easier conve
gence with licensed RC
patterns. Single dot an
line patterns both moveab
to simplify dynamic conve
gence. Thermostatically co
trolled heater to warm th
CG159 on cold days
drive out moisture in humid areas. New high styled two-tone
carrying case gives you that professional look. Size: 10" x 9"
3½". Weight: 9 lbs.

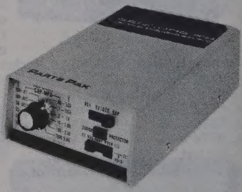
Cat. 444-CG159 Color King III **Net $169.5**

MODEL FE21
HI-LO MULTIMETER



Uses less than 0.1 volt for "in-circuit
ohms measurement of semiconducto
circuitry, integrated circuits, etc., an
1.5 volts for back-to-back measuremer
of diodes, rectifiers, etc. Meter calibrate
0-1000 ohms, with selector switch pos
tions for Rx1, Rx10, Rx100, Rx1
Rx10K, Rx100K and Rx1meg. Measur
DC /AC Volts from 0.1 to 1000
9 ranges. Input inpedances: DC
megohms; AC 12 megohms. Me
sures zero-center volts to ±500 in
ranges. Measures Peak-to-Peak Vo
(RMS) to 2800 in 9 ranges. Measure
DC current to 100 microamps,
300 milliamps, and to 1 ampere. Measures decibels for audio
hi-fi applications. Battery operated, with provision for testing. Met
protected to 1000 times overload with fuse protected multipli
resistors. Laboratory accuracy of ±1.5% DC, 3% AC. With AC /D
-ohms probe.

Cat. 444-FE21 Hi-Lo FET Multimeter **Net $110.0**



FE23

Fully protected meter with exclusive sliding meter cover. Se
contained with lead storage compartments and automatic shut-o
when cover is closed. Provides 1.5% FET DC accuracy. Less circu
loading than VOM or VTVM with 15 megohms DC input res
tance. Ranges: Volts 5 DC ranges from 0-6000 volts. 4 AC range
with 3% full scale accuracy. Power Requirements: Three AA pe
light cells and one 9 volt Eveready 222. Size 4½" x 2-3/8"
7½". Weight: 2½ lbs.

Cat. 444-FE23 Field Effect Multimeter **Net $85.0**

PARTS PAK

24 values of resistors from 10 ohms to 5.6 megohms in ½ and
watt. 9 values of capacitors from 100pf to .5mfd at 500 vol
3 electrolytics: 10 and 100mfd at 450 volts, 1000mfd at 50 vol
Lead storage compartment to prevent lost or tangled leads.

Cat. 444-RC24 Parts Pak **Net $38.**

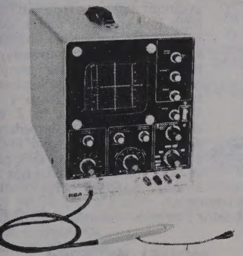
RCA OSCILLOSCOPES

PORTABLE WO-33A
3" SCOPE

An "all-purpose" scope with the bandwidth needed for servicing color-TV, video broadcast monitors and cameras, and for square wave testing of audio and ultrasonic equipment. All the gain required for low-level audio work; servicing pickups, microphones, pre-amps, communications systems, industrial electronics machinery, etc. With vertical amplifier in narrow-band position, sensitivity is 3 rms-mv/in, bandwidth within -3 db, 20 Hz to 150 kHz. Wide-band position,
nsitivity 100 rms-mv/in, band-width within -3 db, 5.5 Hz to 5.5
Iz. Sweep circuit; sawtooth range from Hz to 75kHz. Sync; ex-
rnal ± external; line sweep -160° adjustable phase; sync range to
5 mHz. For accuracy...voltage-calibrated frequency compensated
to-1 step attenuator. For measurement...scaled graph screen and
librating voltage source allows direct reading of peak-to-peak
ltages. For stability..."plus-minus" internal sync...holds sync to
5 mHz. Furnished with low capacitance probe and shielded cable
ompact size 6½" wide, 8¾" high, 10¼" deep for portability.
uilt-in brackets to hold power cord and cables. For 115 v-ac
) Hz.

t. 31-WO-33A Factory Wired & Tested **Net $180.00**

5-INCH DUAL-MODE OSCILLOSCOPE

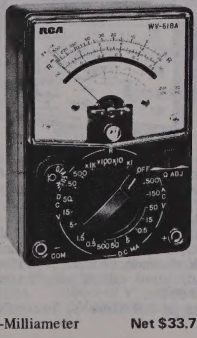


Designed for general purpose use, equipped with non-calibrated trigger mode for viewing ramdom or nonrecurring pulse patterns that cannot be seen using recurrent sweep. Also has continuous sweep in nonrecurrent mode. Features simplified calibration proceedure for voltage measurement. Other features include return-trace blanking, illuminated graph screen, and camera mounting studs for direct mounting on CRT. Regulated power supply prevents trace bounce, usable frequency
sponse to 10MHz. Preset TV "V" and "H" frequencies for in-
nt lock-in. DC Function; DC to 10 MHz (DC to 5 MHz, ±1dB).
orizontal Amplifier 3.5 Hz to 2MHz, Rise Time, Vertical Ampli-
r 35 ns, Sync; Internal, positive or negative, External 60 Hz line.
igger Mode; Frequency Range; 5 Hz to 1 Mhz, in six continuous
justable, non-calibrated ranges; Trigger Sensitivity, 5 mV. Re-
rrent Mode; 10 Hz to 1 MHz continuously adjustable. Phase Con-
ol Range, 0-160 degrees, Z-Axis input; Minimum input for blank-
g, 12 V rms, frequency response, 3 Hz to 500 KHz, Power Re-
irements; 105-130V, 50-60Hz, 30W. Weight 25 lbs., RF applica-
ons and transistor probes available.

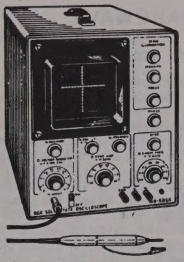
t. 31-WO-535A 5-Inch Dual-Mode Oscilloscope **Net $329.95**

MIRROR-SCALE VOLT-OHM MILLIAMETER

ie WV-518 A features a mirror
ale and has a convenient panel-
ounted fuse to protect the
m divider resistors from ac-
dental burnout. DC voltage
nges: 0–0.5V, 1.5V, 5.0V,
.0V, 50.0V, 150.0V, 500.0V.
C Current Ranges: 0-0.5 MA,
Ma, 50 Ma, 500 Ma, ±30% of
l scale reading. AC Voltage
ns) Ranges: 0-15V, 50V, 150
500V. Sensitivity: 10,000
ms per Volt. Accuracy ±4%
full scale reading. Frequency
esponse (15V Range) 10Hz to
0KHz ±1db. Resistance ranges
X1, RX10, RX100. R x 1K,
easures 1 ohm to 1 megaohm).
ccuracy ±3% of scale length.
tteries; two 1.5 volt penlite
lls. Dimensions: 5-1/8 x 3½ x
7/8". Weight: 1 lb.



t. 31-WV-518A Volt-Ohm-Milliameter **Net $33.75**

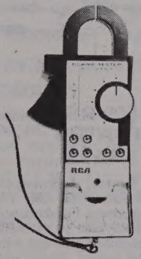


5" SOLID-STATE OSCILLOSCOPE

Features such as flat-face cathode ray tube, return-trace blanking, illuminated graph screen, and camera mounting studs make the WO-505A ideally suited to industrial, laboratory, and servicing applications. Frequency response; vertical amplifier DC to 5 mHz ±1 db, usable to 8 mHz; horizontal amplifier 3.5 Hz to 2 mHz. Deflection sensitivity: vertical amplifier direct probe 15 mV P-P/in., lo-cap probe 150 mV P-P/in. direct to vertical deflection plates 40 v P-P/in. Sweep oscillator frequency range 10 Hz to 1 mHz, with preset positions of 30 Hz and 7875 Hz. Vertical amplifier input: at "V" input 1 meg. shunted by 25 pF; probe "direct" 1 meg. shunted by 75 pF; probe "lo-cap" 10 megs shunted by 14 pF. Horizontal amplifier and sync input 1 meg. shunted by 20 pF. Phase control 0 to 180°. Minimum Z-axis input for blanking 12 v-rms, frequency response 3 Hz to 500 kHz. Maximum a-c input voltage (in presence of 400 v-dc) 600 v. P-P. Vertical amplifier rise time 0.1 micro-sec. Operates from 105-130 v-ac, 50-60 Hz, average power consumption 30 watts. Size (HWD) 11.375 x 9 x 15.5". Wt. 25 lbs. Furnished with WG-400A Direct/Low Capacitance Probe and cable, insulated alligator clip, and instruction manual

Cat. 31-WO-505A 5" Solid-State Scope **Net $299.00**
Cat. 31-WG-302A RF-IF-VF Signal Trace Probe **Net $9.00**

CLAMP TESTER



Designed for servicing electrical equipment such as motor-operated machinery and aplicances, the WV-526A measures AC current up to 500 amps, without requiring direct connection to the electrical circuit. The jaws of the clamp have been especially designed to fit around large connectors. Measures AC current, volts and ohms. Special "Stop-Lock" feature "freezes" meter pointer for convenient reading. Housed in high-impact-resistant plastic case, and is color-coded for easy reading. Supplied with line/splitter current transformer for reading currents as low as 100 milliamperes. Included in package are line/splitter current transformer, voltage test leads, carrying case for accessories and an extra fuse. AC Current; 0-6.0 A., 1.5 A., 6A., 15 A., 60 A., 150 A., 300 A.; Accuracy; ±3% of full scale reading. AC Voltage; 0-150V, 300V, 600V. Accuracy; 3% of full scale reading. Sensitivity; 2,200 ohms-per-volt. Resistance 1 ohm to 1000 ohms (30 ohms center scale). Size: 2¾ x 7½ x 1½ (70mm x 190mm x 38mm). Weight 9½ oz. (270 grams).

Cat. 31-WV-526A Clamp Tester **Net $54.00**

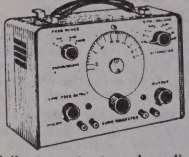
WE-130A SOUND LEVEL METER

Simplifier measurement of enviromental sound levels. Used for noise polution monitor in factories, on construction sites, at airports, in heavy traffic, to determine sound levels of stereo and hi-fi sets, public address systems, music amplifiers. Color coded meter indicates degree of danger. Also tests a effectiveness of acoustic equipment and padding materials. Sound level range; 70dBA to 110dBA (Ref. $\mu N/M^2$), meter frequency response; "A" weighted, Microphone Element: Ceramic, omnidirectional, Meter response time, slow. Accuracy: 50°F–90°F, ±1dB; 32°F–50°F, ±2dB, 90°F–110°F, ±2dB. Dimensions: 6-7/8 x 1-15/16 x 11 ¼. Batteries, 4 penlite 9 (1.5V) or equivalent. Supplied with rugged, high-impact carrying case.

Cat. 31-WE-130A Sound Level Meter **Net $75.00**

RCA TEST EQUIPMENT

WA-44C SINE/SQUARE WAVE AUDIO SIGNAL GENERATOR

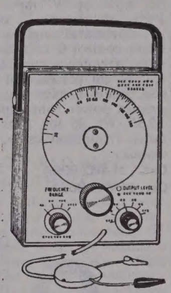


Used for checking the frequency response characteristics of audio amplifiers, the testing of loudspeakers and enclosures or determining the impedance of LC combinations. Response 20 Hz to 200,000 Hz in four bands. Consists of a "Bridged-T" sine-wave oscillator with cathode-follower output, and a clipping and shaping circuit for square waves. Amplitude variation not more than ±1.5db. Total harmonic distortion limited to 0.5% over range of 30 Hz to 15 kHz. Separate 60 Hz line frequency output for intermodulation distortion measurements. Operates from 105-124 v-ac, 50-60 Hz. Size 10-11/16" x 6-7/8" x 7" high.

Cat. 31-WA-44C Sine/Square Wave Generator **Net $99.00**

MODEL WA-504A

SINE/SQUARE WAVE SIGNAL GENERATOR

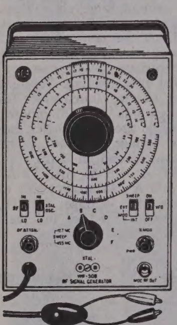


All solid state. Provides a sine or square wave signal for service, industrial, laboratory, and educational applications. Coverage from 20 cps to 200,000 cps. New solid state circuit design includes an MOS transistor. Amplitude variation no more than ± 1.5 db. Maximum sine wave distortion less than 0.25%. Uses include frequency-response measurements, testing speakers and enclosures, square wave testing and checking impedance of LC combinations.

Cat. 31-WA-504A **Net $99.00**

WR-50B RF GENERATOR

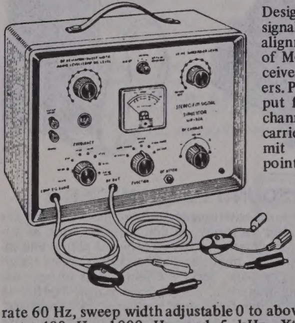
FOR AM & FM



For general service, maintenance and trouble-shooting in AM, FM Hi-Fi and CB receivers. Fundamental coverage from 85 kHz to 40 mHz. Built-in xtal calibrating circuit with front-panel xtal socket. Sweep output of 455 kHz and 10.7 mHz for alignment of AM and FM IF's. Permanently attached shielded RF output cable. Built-in DC blocking capacitors. All calibrations on a large, easy-to-read, vernier driven dial. Overall size (HWD) 7.75 x 5.37

Cat. 31-WR-50B Each **Net $85.00**

STEREO FM SIGNAL GENERATOR



Designed to generate the signals necessary for service, alignment and maintenanc of Mono and Stereo FM receivers and multiplex adapters. Provides FM Stereo output for either left or right channel. The 100 mHz FM carrier is adjustable to permit selection of a quiet point in the FM band. RF deviation is adjustable from 0 to 75 kHz. Switch disables 19 kHz oscillator for low distortion mono FM output. 100 mHz sweep output for RF/IF alignment. Sweep rate 60 Hz, sweep width adjustable 0 to above 750 kHz. Audio outputs 400 Hz. 1000 Hz, and 5 kHz. Xtal controlled 19 kHz and 38 kHz for multiplex circuit adjustment. 67 kHz and 72 kHz outputs for SCA trip circuit adjustments. Complete with output cables. Case 13½" x 10" x 8". Weight 14 pounds.

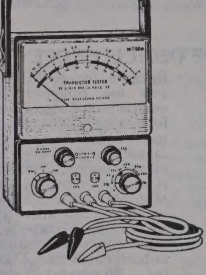
Cat. 31-WR-52A Stereo FM Signal Generator **Net $275.00**

COLOR/B&W PICTURE TUBE SOLID STATE CIRCUITRY

Tests both color and black-an white picture tubes for emmisic quality, interelectrode leakage, ar shorted elements. Complete soli state circuitry includes a tri device for controlling internal vol ages. Test data is provided fo testing more than 1000 pictu tube types. Five socket adapto are supplied, including a versati "universal" adapter that can connected to the base of any picture tube. Includes "reactivat function to improve performance of some low-emission tubes, a a sensitive adjustment to establish proper cut-off point for ea tube. Measures AC line voltage, to 1500 volts for grid and catho voltages, and to 50,000 volts for anode voltages with a accessory WG-297 high voltage probe. Case is 12" x 10" x 5 has space for adapters. Wt. 10 lbs. Operates from 105-132 v- 50-60 Hz power line.

Cat. 31-WT-509A Picture Tube Tester **Net $110.0**

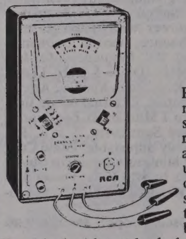
MODEL WT—501A IN-CIRCUIT/OUT OF-CIRCUIR TRANSISTOR TESTER



Battery operated and complete portable. Tests transistors bo in-circuit and out-of-circuit. Te both low and high power tra sistors. Has both NPN and P sockets to allow conventio transistor matching for comp mentary symmetry applicatio Measures DC beta from 1 1000. leakage down to 2 croamps. Special low-impedan circuitry assures reliable in-c cuit testing. Adjustable collect current from 20 microamps 1 amp. Supplied with 3-co coded test leads for in-circuit testing.

Cat. 31-WT-501A Transistor Tester **Net $69.5**

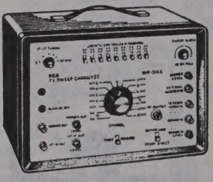
MODEL WC-506A TRANSISTOR/DIODE TESTER



Provides fast relative gain and leaka measurements of NPN and PNP tra sistors. Gives checks of forward a reverse diode current. Has panel sock and test leads for out-of-circuit mea urements. All measurements are in cated on an easy-to-read meter with single red/green scale. Operates fro two 1.5 volt pen-light cells. Stur bakelite case measures 3¾" x 6¼" x Furnished with test leads, less batteries.

Cat. 31-WC-506A Transistor/Diode Tester **Net $19.5**

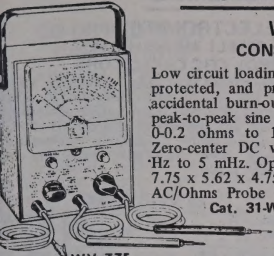
WR-514A TV SWEE CHANALYST



Combines features of a swe generator, marker generator a marker adder. RF, IF, and vid output sweep signals per alignment of VHF tuners, amplifiers, video amplifiers, a color band-pass amplifiers. Swe output frequencies TV chann 2-4, 5-6, 7-13, IF/Video 50 k to 50 mHz, FM 88 to 108 mHz to 50 mHz, FM 88 to 108 mH Marker frequencies 4.5 mHz sound IF, 41.25 mHz sound carri 41.67 mHz chroma bandpass, 42.17 mHz color subcarri 42.67 mHz chroma bandpass, 45.75 mHz picture carrier, 47. adjacent sound, 40-50 mHz spare (int. xtal must be adde Maximum output voltage (TV, IF/Video, FM) at least 0.1 vol Attenuator range (RF/IF Video) 60 db. Sweep width (adjustabl TV channels 12 mHz, IF/Video & FM 20 mHz. Complete with put/output cables, adapters and instructions. For 105-125 v- 50-60 Hz.

Cat. 31-WR-514A Sweep Chanalyst **Net $380.**

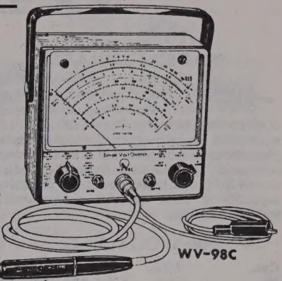
RCA TEST EQUIPMENT


WV-77E

WV-77E VOLTOHMYST
CONSTANT INPUT 11 MEGOHMS

Low circuit loading for Radio and TV servicing. Meter electronically protected, and precision-ohms-measurement network fused against accidental burn-out. Measures DC/AC volts from 0-1.5 to 0-1500, peak-to-peak sine wave volts from 0-4 to 0-4000, resistances from 0-0.2 ohms to 1000 megohms, each in 7 over-lapping ranges. Zero-center DC volts scale. Accuracy F.S.: DC±3%; AC±5%, 40 Hz to 5 mHz. Operates from 105-125 v-ac; 50-60 Hz. Size (HWD) 7.75 x 5.62 x 4.75". Wt. 5 lbs. Furnished with DC Probe and cable, AC/Ohms Probe and cable, Ground cable and instruction book.

Cat. 31-WV-77E VoltOhmyst **Net $69.50**

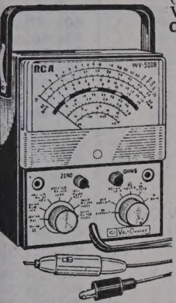

WV-98C

SENIOR VOLTOHMYST
6-1/2" MIRROR SCALE METER

Input 11 megohms on all ranges. Meter electronically protected against burn-out. Measures DC volts from 0-0.5 to 0-1500. AC volts from 0-1.5 to 0-1500, Peak-to-Peak sine wave volts from 0-4 to 0-4200, resistances from 0.2 to 1000 megohms, each in 7 over-lapping ranges. Uses rugged 200 uA meter movement. Accuracy DC/AC ±3% F.S. Frequency response ±1 dB 30 Hz to 3 mHz, up to 15 v-ac. Operates from 110-130 v-ac, 50-60 Hz. Overall size (HWD) 6.5 x 7 x 3.75". Wt. 6 lbs. Furnished complete with WG-299E DC/AC/Ohms Probe and cable. VS036 battery, alligator clip and instructions.

Cat. 31-WV-98C Senior VoltOhmyst **Net $99.00**

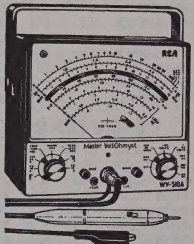
WV-500B



WV-500B SOLID-STATE VOLTOHMYST
BATTERY OPERATED. 11 MEGOHMS INPUT

For portable use. Instant operation, no shifting as in vacuum tube VT-VM's. Large, mirror scale meter electronically protected against overloads. Measures DC volts from 0-0.5 to 0-1500, AC RMS volts from 0-1.5 to 0-1500, AC Peak-to-Peak volts from 0-14 to 0-4200, DC Current from 2 uA to 1.5 Amperes, resistances from 0.2 ohms to 1000 megohms. Frequency response ±1 dB (1.5 and 5.0 v-ac ranges) 30 Hz to 3 mHz. Operates from one VS035 A and three VS323 batteries. Size (HWD) 6.87 x 5.25 x 3.12". Wt. 3.5 lbs. Furnished with DC/AC Ohms Probe and cable, alligator clip, current test leads, batteries and instruction manual.

Cat. 31-WV-500B Solid-State VoltOhmyst **Net $99.00**


WV-510A

WV-510A SOLID-STATE, BATTERY/AC VOLTOHMYST®
DC INPUT 21 MEGOHMS

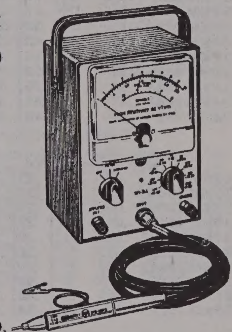
Operates from 120 v-ac, or internal (not included batteries. Large, mirror-scale meter is electroni-protected against overloads. Measures DC volts from 0-0.5 to 0-1500, DC current from 0-0.5 to 0-1500 mA, AC volts RMS from 0-1.5 to 0-1500, Peak-toPeak sine wave volts from 0-14 to 0-4200, resistances from 0.2 ohms to 1000 megohms. Frequency response (1.5 & 5.0 v-ac) ±1 dB 30 Hz to 3 mHz. Accuracy, F.S. ±3%. Overall size (HWD) 6.87 x 5.25 x 3.12". Wt. 3.5 lbs. Furnished complete with DC/AC/Ohms Probe and cable, alligator clip, current leads. VS036 battery and instructions.

Cat. 31-WV-510A Battery/AC Operated VoltOhmyst **Net $135.00**

WV-76A HIGH SENSITIVITY AC VTVM
.0002 TO 100 V-AC. 10 HZ TO 1.5 MHZ

An amplified AC VTVM for audio voltage, gain and frequency measurements in production and maintenance applications in industry, research, schools and broadcasting. Preamplifier may be used separately, has a gain of 38 dB (0.8 v. output for 0.01 v. input). Measures AC volts from 0-0.01 to 0-100 in 9 ranges. Accuracy ±5% F.S. Measures decibels from -40 to +40 in 9 ranges. Frequency response "direct ±1 dB 10 Hz to 1.5 mHz, "low-cap" ±1 dB 10 Hz to 500 kHa. Input characteristics: at input 1 Meg shunted by 58 pF; "direct" 1 Meg shunted by 95 pF;"low cap" 10 Megs shunted by 13 pF. Operated from 50 to 400 Hz, 105-125 v-ac. Size (HWD) 5.37 x 7.37 x 4.75". Wt. 5 lbs. Furnished complete with WG-300B Direct/Low-Capacitance Probe, "Slip-On" Alligator Clip, Clip Insulator and instructions.

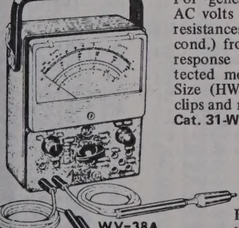
Cat. 31-WV-76A High Sensitivity AC VTVM **Net $99.00**


WV-76A

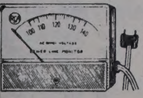
WV-38A VOLT-OHM-MA METER
20,000 Ω/V DC, 5,000 Ω/V AC

For general service uses. Measures DC volts from 0-0.25 to 0-5000, AC volts from 0-2.5 to 0-5000, DC current from 0-50 uA to 0-10 Amp., resistances from 0-2K ohms to 0-20 megohms, output volts (0.1 series cond.) from 0-2.5 to 0-250, and decibels from -20 to +50 dB. Frequency response 10 Hz to 50 kHz on 2.5, 10 and 50 v-ac ranges. Diode protected meter. Requires 4 penlight cells and 1 "D" cell (not supplied). Size (HWD) 5.87 x 5.25 x 3.12". Wt. 3.5 lbs. With test leads, alligator clips and manual.

Cat. 31-WV-38A Vot-Ohm-Ma Meter **Net $66.00**


WV-38A

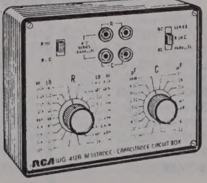
POWER LINE MONITORS



For constant indication of line voltage, or checking (with a variable isolation transformer) when line voltages are low. Segmental scales for precise readings. Cases (HWD) are 3.93 x 5 x 3.06", have rear slots for wall mounting. Frequency range 25 to 400 Hz.

Cat. 31-WV-120A	100-140 V.	**Net Ea.**
Cat. 31-WV-503A	200-280 V.	**$23.00**

RES-CAP CIRCUIT BOX

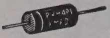


For resistance or capacity substitution in service or design applications. Has a selector switch for 36 resistors in standard values (from 15 ohms to 10 megohms. 1 watt ±10%) and for 18 capacitors (from 100 pF to 0.22 uF, 600 volt, ±10%). Simplified switching for separate resistance or capacity, or series or parallel RC. Standard banana jack terminals. Size (HWD) 5.37 x 6.87 x 2.37". Wt. 1 lb., 12 oz. With test leads.

Cat. 31-WG-412A Completely Assembled **Net $34.50**

C-D-E TUBULAR CAPACITORS

TYPE PKM
MOLDED TUBULARS



For d-c, a-c and pulsed applications in general service and construction of electronic apparatus. Paper-film dielectric with solid impregnant and molded black phenolic cases for maximum protection and resistance to moisture. Operating temp. to +125°C without derating. Capacity tolerance ± 10%. *For case dimensions see table below.

400 V-DC WRKG.

Cat. No.	Mfd. Cap	*	Net 1-24	25-49	50-99
3-PKM-4D39	.0039	A	$.21	$.15	$.12
3-PKM-4D47	.0047	A	.21	.15	.12
3-PKM-4S1	.01	A	.21	.15	.12
3-PKM-4S27	.027	B	.24	.17	.13
3-PKM-4S33	.033	B	.24	.17	.13
3-PKM-4S47	.047	C	.24	.18	.14
3-PKM-4S5	.050	C	.27	.20	.16
3-PKM-4S68	.068	C	.27	.20	.16
3-PKM-4P1	.1	D	.27	.20	.16
3-PKM-4P22	.22	F	.36	.27	.21
3-PKM-4P27	.27	F	.42	.32	.25
3-PKM-4P47	.47	G	.57	.43	.33
3-PKM-4P5	.40	G	.63	.47	.37
3-PKM-4P68	.68	H	.78	.59	.46
3-PKM-4W1	1	J	.96	.72	.56

600 V-DC- WRKG.

3-PKM-6D12	.0012	A	.21	.15	.12
3-PKM-6D22	.0022	A	.21	.15	.12
3-PKM-6D33	.0033	A	.21	.15	.12
3-PKM-6D5	.0050	A	.21	.15	.12
3-PKM-6D56	.0056	B	.21	.15	.12
3-PKM-6D68	.0068	B	.21	.15	.12
3-PKM-6S1	.01	B	.21	.15	.12
3-PKM-6S15	.015	B	.21	.15	.12
3-PKM-6S22	.022	B	.21	.15	.12
3-PKM-6S33	.033	C	.24	.17	.13
3-PKM-6S47	.047	D	.24	.17	.13
3-PKM-6S5	.050	D	.27	.20	.16
3-PKM-6S68	.068	D	.27	.20	.16
3-PKM-6P1	.1	E	.33	.25	.19
3-PKM-6P15	.15	F	.42	.32	.25
3-PKM-6P22	.22	G	.54	.41	.32
3-PKM-6P27	.27	G	.63	.47	.37
3-PKM-6P33	.33	H	.75	.55	.43
3-PKM-6P47	.47	J	.87	.65	.51
3-PKM-6P5	.50	E	.48	.36	.28

1000 V-DC WRKG.

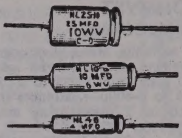
3-PKM-10D1	.001	A	.21	.15	.12
3-PKM-10D5	.005	B	.24	.17	.13
3-PKM-10D68	.0068	B	.24	.17	.13
3-PKM-10S1	.01	C	.27	.20	.16
3-PKM-10S22	.022	D	.30	.23	.18
3-PKM-10S33	.033	D	.36	.27	.21
3-PKM-10S47	.047	E	.42	.36	.28
3-PKM-10S5	.050	E	.48	.36	.28
3-PKM-10S68	.068	F	.42	.36	.28
3-PKM-10P1	.1	G	.54	.41	.32

1600 V-DC WRKG.

3-PKM-16D1	.001	B	.27	.20	.16
3-PKM-16D22	.0022	B	.27	.20	.16
3-PKM-16D33	.0033	B	.27	.20	.16
3-PKM-16D47	.0047	B	.33	.25	.19
3-PKM-16D5	.0050	B	.33	.25	.19
3-PKM-16D68	.0068	C	.36	.27	.21
3-PKM-16S1	.01	D	.48	.36	.28
3-PKM-16S22	.022	F	.54	.41	.32
3-PKM-16S33	.033	F	.54	.41	.32
3-PKM-16S47	.047	E	.66	.50	.39
3-PKM-16S5	.050	D	.75	.56	.44

PKM CASE SIZES. DIA. x L.

A	5/16”x1”	**H**	¾”x2¼”
B	3/8”x1¼”	**J**	1”x2-1/8”
C	7/16”x1¼”	**E**	9/16”x1-9/16”
D	½”x1½”		....
F	5/8”x1-7/8”		
G	11/16”x1-15/16”		



“ELECTROMITE”
ULTRA-SMALL METAL CASED ELECTROLYTIC CAPACITORS

Aluminum foil capacitors with axial leads, hermetically seale in metal cases. Their low leakage makes them ideal for appli cations such as printed circuitry, transistorized equipment etc., requiring compact and lightweight components of hig electro-mechanical dependability. Operating temperatur range -40°C. to +105°C. *See case siz table below.

3 V-DC WRKG.

Cat. No.	Mfd. Cap.	*	Net 1-24	25-49	50-99
3-NLW-25-3	25	A	$.54	$.38	$.30
3-NLW-35-3	35	A	.54	.38	.30
3-NLW-75-3	75	C	.60	.42	.34
3-NLW-100-3	100	C	.60	.42	.34
3-NLW-125-3	125	C	.60	.42	.34
3-NLW-150-3	150	C	..78	.53	.42
3-NLW-175-3	175	F	.78	.53	.42
3-NLW-200-3	200	F	.78	.53	.42
3-NLW-250-3	250	J	.81	.56	.44
3-NLW-300-3	300	J	.81	.56	.44
3-NLW-350-3	350	K	.84	.58	.46
3-NLW-400-3	400	K	.84	.58	.46
3-NLW-450-3	450	K	.87	.60	.48
3-NLW-500-3	500	L	.87	.60	.48
3-NLW-1000-3	1000	N	.96	.69	.54

6 V-DC WRKG.

3-NLW-10-6	10	A	.54	.38	.30
3-NLW-20-6	20	A	.54	.38	.30
3-NLW-30-6	30	A	.54	.38	.30
3-NLW-35-6	35	A	.54	.38	.30
3-NLW-150-6	150	F	.81	.56	.44
3-NLW-175-6	175	F	.81	.56	.44
3-NLW-250-6	250	K	.84	.58	.46
3-NLW-300-6	300	K	.84	.58	.46
3-NLW-350-6	350	K	.87	.60	.48
3-NLW-500-6	500	M	.90	.62	.49
3-NLW-600-6	600	M	.93	.64	.51
3-NLW-800-6	800	N	.96	.69	.55

10 V-DC WRKG.

3-NLW-8-10	8	A	.54	.38	.30
3-NLW-40-10	40	B	.54	.38	.30
3-NLW-50-10	50	C	.60	.42	.34
3-NLW-75-10	75	C	.78	.53	.42
3-NLW-125-10	125	F	.81	.56	.44
3-NLW-150-10	150	J	.84	.58	.46
3-NLW-225-10	225	K	.87	.60	.48
3-NLW-450-10	450	M	.93	.64	.51

12 V-DC WRKG.

3-NLW-15-12	15	A	.54	.38	.30
3-NLW-35-12	35	B	.54	.38	.30
3-NLW-100-12	100	F	.81	.56	.44
3-NLW-200-12	200	K	.87	.60	.48
3-NLW-250-12	250	K	.87	.60	.48
3-NLW-300-12	300	L	.87	.60	.48
3-NLW-400-12	400	M	.93	.64	.51

16 V-DC WRKG.

3-NLW-4-16	4	A	.54	.34	.30
3-NLW-5-16	5	A	.54	.34	.30
3-NLW-6-16	6	A	.54	.34	.30
3-NLW-10-16	10	A	.54	.34	.30
3-NLW-15-16	15	A	.54	.34	.30
3-NLW-20-16	20	A	.54	.34	.30
3-NLW-25-16	25	B	.54	.34	.30
3-NLW-30-16	30	B	.60	.42	.34
3-NLW-40-16	40	C	.60	.42	.34
3-NLW-50-16	50	C	.60	.42	.34
3-NLW-75-16	75	F	.78	.53	.42
3-NLW-100-16	100	F	.81	.56	.44
3-NLW-125-16	125	J	.81	.56	.44
3-NLW-150-16	150	J	.84	.58	.46
3-NLW-175-16	175	K	.84	.58	.46
3-NLW-200-16	200	K	.87	.60	.48

Cornell-Dubilier Electric makes a complete line of capacitors of every type. For full information ask for their Component Selector.

25 V-DC WRKG.

Cat. No.	Mfd. Cap.	*	Ea. 1-24	25-49	50 9
3-NLW-1-25	1	A	.54	.38	.3
3-NLW-3-25	3	A	.54	.38	.3
3-NLW-6-25	6	A	.54	.38	.3
3-NLW-8-25	8	A	.54	.38	.3
3-NLW-10-25	10	A	.54	.38	.3
3-NLW-15-25	15	A	.54	.38	.3
3-NLW-25-25	25	C	.60	.42	.3
3-NLW-30-25	30	C	.60	.42	.3
3-NLW-35-25	35	C	.60	.42	.3
3-NLW-40-25	40	C	.78	.53	.4
3-NLW-50-25	50	F	.78	.53	.4
3-NLW-75-25	75	J	.81	.56	.4
3-NLW-100-25	100	J	.84	.58	.4
3-NLW-125-25	125	K	.84	.58	.4
3-NLW-150-25	150	L	.87	.60	.4
3-NLW-175-25	175	M	.93	.64	.5
3-NLW-200-25	200	M	.93	.64	.5
3-NLW-250-25	250	N	.96	.69	.5

50 V-DC WRKG.

3-NLW-1-50	1	A	.54	.38	.3
3-NLW-2-50	2	A	.54	.38	.3
3-NLW-3-50	3	A	.54	.38	.3
3-NLW-4-50	4	A	.54	.38	.3
3-NLW-5-50	5	A	.54	.38	.3
3-NLW-6-50	6	A	.54	.38	.3
3-NLW-8-50	8	B	.54	.38	.3
3-NLW-10-50	10	B	.60	.42	.3
3-NLW-15-50	15	C	.60	.42	.3
3-NLW-20-50	20	C	.78	.53	.4
3-NLW-25-50	25	F	.78	.53	.4
3-NLW-30-50	30	H	.81	.56	.4
3-NLW-35-50	35	J	.81	.56	.4
3-NLW-40-50	40	J	.84	.58	.4
3-NLW-50-50	50	K	.84	.58	.4
3-NLW-75-50	75	L	.87	.60	.4
3-NLW-100-50	100	M	.90	.63	.5
3-NLW-125-50	125	N	.96	.69	.5

100 V-DC WRKG.

3-NLW-2-100	2	A	.60	.42	.3
3-NLW-6-100	6	C	.78	.53	.4
3-NLW-8-100	8	H	.81	.56	.4
3-NLW-10-100	10	J	.81	.56	.4
3-NLW-20-100	20	L	.87	.60	.4
3-NLW-25-100	25	L	.90	.63	.5
3-NLW-30-100	30	M	.93	.64	.5
3-NLW-40-100	40	N	.96	.69	.5

150 V-DC WRKG.

3-NLW-1-150	1	A	.60	.42	.3
3-NLW-2-150	2	B	.60	.42	.3
3-NLW-3-150	3	C	.69	.47	.3
3-NLW-4-150	4	F	.78	.53	.4
3-NLW-5-150	5	F	.78	.53	.4
3-NLW-6-150	6	J	.81	.56	.4
3-NLW-8-150	8	J	.81	.56	.4
3-NLW-10-150	10	K	.84	.58	.4
3-NLW-12-150	12	L	.87	.60	.4
3-NLW-15-150	15	M	.87	.60	.4
3-NLW-18-150	18	M	.90	.63	.5
3-NLW-20-150	20	N	.93	.64	.5
3-NLW-25-150	25	N	.96	.69	.5

NLW CASE SIZES DIA. X L.

A	¼” x ½”	**J**	3/8” x ¾”
B	¼” x 5/8”	**K**	3/8” x 7/8
C	5/16” x 5/8”	**L**	3/8” x 1”
F	5/16” x ¾”	**M**	3/8” x 1¼
H	3/8” x 5/8”	**N**	3/8” x 1½

C-D-E MICA CAPACITORS

CD DIPPED MICA CAPACITORS

Designed to replace molded or ceramic capacitors in critical applications. Hard phenolical coating gives protection against mechanical damage, humidity and moisture. The Types CD6 and CD7 are micro-miniature types
l for use in delay lines and IF trans-
ners. The Types CD10 thru CD42 are
er and higher rated dipped mica capaci-
. Temperature range -55°C to +125°C.
erance: D ± ½pf; K ±10%; J ± 5% ;
1 p fd. Operating voltage 500, †300,
0 V-DC. Other values are available.

	pfd. Cap.	‡	Net 1-24	25-99
D6CD030C	3	BB	$.450	$.263
D6CD050C	5	BB	.450	.263
D6CD100K	10	BB	.450	.263
D6CD110K	11	BB	.450	.263
D6CD150K	15	BB	.460	.269
D6CD200K	20	BB	.460	.269
D6CD240K	24	BB	.480	.280
D6ED330J	33	BB	.558	.326
D6ED390J	39	BB	.558	.326
D6ED470J	47	BB	.558	.326
D6ED750J	75	BB	.654	.382
D6EC820J†	82	BB	.672	.392
D6FC101J†	100	BB	.672	.392
D6FC121J†	120	BB	.690	.403
D7FD151J	150	BC	.702	.410
D7FD201J†	200	BC	.768	.448
D7FA391J*	390	BD	1.050	.613
D7FA511J*	510	BD	1.152	.672
D7FA102J*	1000	BF	1.950	1.138
D10C050D	5	A	.456	.266
D10C100J	10	A	.456	.266
D10C120J	12	A	.456	.266
D10C150J	15	A	.456	.266
D10C180J	18	A	.456	.266
D10E200J	20	A	.312	.182
D10E220J	22	A	.324	.189
D10E240J	24	A	.324	.189
D10E270J	27	B	.324	.189
D10E300J	30	C	.324	.189
D10E330J	33	C	.324	.189
D10E390J	39	C	.330	.193
D10E470J	47	C	.336	.196
D10E510J	51	C	.336	.196
D10E560J	56	C	.348	.203
D10E680J	68	C	.354	.207
D10F101J	100	E	.378	.221
D15C050D	5	BH	.318	.186
D15C100D	10	BH	.318	.186
D15C150J	15	BH	.318	.186
D15C180J	18	BH	.318	.186
D15E220J	22	BH	.258	.151
D15E270J	27	BH	.258	.151
D15E300J	30	BH	.258	.151
D15E330J	33	BH	.258	.151
D15E470J	47	BH	.258	.151
D15E510J	51	BH	.258	.151
D15E560J	56	BH	.258	.151
D15E680J	68	BI	.258	.151
D15F101J	100	BJ	.264	.154
D15F121J	120	BK	.282	.165
D15F151J	150	BL	.306	.179
D15F161J	160	BL	.330	.193
D15F181J	180	BL	.354	.207
D15F201J	200	BM	.354	.207
D15F221J	220	BN	.378	.221
D15F271J	270	L	.426	.249
D15F301J	300	L	.450	.263
D15F331J	330	L	.498	.291
D15F361J	360	L	.522	.305
D15F391J	390	L	.546	.319
D15F471J	470	BO	.612	.357
D15F511J	510	BP	.660	.385
D15F561J†	560	L	.660	.385
D15F681J†	680	L	.780	.455
D15F102J*	1000	BP	.852	.497
D15F122J*	1200	BQ	.996	.581
D19F431J	430	N	.378	.221
D19F471J	470	N	.426	.249
D19F511J	510	O	.426	.249

Continued in Next Column

DIPPED TYPE CD CONT'D.

Cat. No.	pfd. Cap.	‡	Net 1-24	25-99
3-CD19F561J	560	O	$.426	$.249
3-CD19F621J	620	O	.468	.273
3-CD19F681J	680	P	.468	.273
3-CD19F751J	750	P	.510	.298
3-CD19F821J	820	P	.510	.298
3-CD19F911J	910	P	.552	.322
3-CD19F102J	1000	Q	.600	.350
3-CD19F112J	1100	Q	.642	.375
3-CD19F122J	1200	R	.684	.399
3-CD19F132J	1300	R	.732	.427
3-CD19F152J	1500	S	.816	.476
3-CD19F162J	1600	T	.816	.476
3-CD19F182J	1800	U	.906	.529
3-CD19F202J	2000	U	.990	.578
3-CD19F222J	2200	V	1.080	.630
3-CD19F242J	2400	W	1.134	.662
3-CD19F272J	2700	X	1.284	.749
3-CD19F302J	3000	Y	1.440	.840
3-CD19F332J	3300	Z	1.542	.900
3-CD19F362J	3600	AA	1.698	.991
3-CD19F392J	3900	BB	1.800	1.050
3-CD19F432J	4300	AC	2.004	1.170
3-CD19F472J	4700	AD	2.154	1.257
3-CD30F512J	5100	AE	1.390	.834
3-CD30F562J	5600	AF	1.515	.909
3-CD30F622J	6200	AF	1.640	.984
3-CD30F682J	6800	AG	1.825	1.095
3-CD30F752J	7500	AH	1.970	1.182
3-CD30F822J	8200	AI	2.135	1.281
3-CD30F912J	9100	AJ	2.185	1.311
3-CD30F103J	10000	AK	2.575	1.545
3-CD30F113J	11000	AL	2.750	1.650
3-CD30F123J	12000	AM	3.025	1.815
3-CD30F133J	13000	AN	3.290	1.974
3-CD30F153J	15000	AO	3.675	2.205
3-CD30F163J	16000	AP	4.000	2.400
3-CD30F183J	18000	AQ	4.325	2.595
3-CD30F203J	20000	AR	4.775	2.865
3-CD42F223J	22000	AS	5.425	3.255
3-CD42F243J	24000	AT	5.885	3.531
3-CD42F273J	27000	AU	6.360	3.816
3-CD42F303J	30000	AV	6.955	4.173
3-CD42F333J	33000	AW	7.425	4.455

‡Size in inches L x W x T

A	.36x.33x.19	AC	.69x.57x.33
B	.37x.33x.19	AD	.70x.58x.35
C	.37x.34x.19	AE	.78x.86x.28
D	.37x.34x.20	AF	.78x.87x.29
E	.37x.35x.20	AG	.78x.87x.30
L	.47x.39x.21	AH	.79x.88x.31
M	.47x.40x.22	AI	.79x.88x.32
N	.64x.51x.20	AJ	.79x.88x.33
O	.65x.51x.20	AK	.80x.89x.34
P	.65x.51x.21	AL	.80x.89x.35
Q	.65x.52x.22	AM	.80x.89x.36
R	.66x.52x.22	AN	.81x.89x.37
S	.66x.52x.23	AO	.81x.90x.39
T	.66x.53x.23	AP	.82x.90x.41
U	.67x.53x.24	AQ	.82x.91x.43
V	.67x.53x.25	AR	.83x.92x.45
W	.67x.54x.26	AS	1.42x.88x.31
X	.68x.54x.27	AT	1.43x.88x.32
Y	.68x.55x.28	AU	1.43x.88x.33
Z	.68x.55x.29	AV	1.44x.89x.35
AA	.68x.56x.30	AW	1.44x.89x.36
AB	.69x.56x.31	BJ	.46x.36x.18
BB	.27x.14x.10	BK	.46x.37x.18
BC	.27x.22x.11	BL	.46x.37x.19
BD	.28x.25x.13	BM	.46x.38x.19
BE	.30x.26x.14	BN	.46x.38x.20
BF	.32x.30x.16	BO	.48x.41x.23
BH	.45x.36x.17	BP	.49x.42x.24
BI	.45x.36x.18	BQ	.50x.43x.25

CAPACITOR DECADES

Provide a fast, easy way to determine the required capacity in operating apparatus by the substitution method.

Cat. No.	Max. Cap.	Step Cap.	Cap. Tol.	Net Each
3-CDA-2	.011	.0001	2%	$15.37
3-CDB-3	1.1	.01	3%	17.28
3-CDC-3	10.0	1.0	3%	28.61
3-CDT	1100	10	––	139.54

TYPE DPMS
DIPPED PAPER-FILM

A paper-film dielectric capacitor with a high-impact, rock hard dip casing that affords excellent protection against moisture, soldering iron contact and other mechanical damage. #20 AWG wires may be straight for point to point wiring, or radial for printed circuit boards. Dykanol Y synthetic solid impregnant will not soften or flow at temperatures form -55°C to +125°C. DPMS capacitors meet MIL-C-25 for moisture resistance and temperature and immersion cycling. Tol. ± 10%. *See below.

200 V-DC WRKG.

Cat. No.	Mfd. Cap.	*	Ea. 1-24	25-49	50-99
3-DPMS-2S22	.022	A	$.18	$.14	$.11
3-DPMS-2S47	.047	B	.21	.15	.12
3-DPMS-2P1	.1	C	.24	.18	.14
3-DPMS-2P22	.22	D	.36	.26	.20
3-DPMS-2P47	.47	E	.45	.34	.27

400 V-DC WRKG.

3-DPMS-4S1	.01	F	.18	.14	.11
3-DPMS-4S22	.022	G	.18	.14	.11
3-DPMS-4S47	.047	H	.21	.16	.12
3-DPMS-4P1	.1	I	.27	.20	.16
3-DPMS-4P22	.22	J	.36	.26	.20

600 V-DC WRKG.

3-DPMS-6D1	.001	AA	.18	.14	.11
3-DPMS-6D22	.0022	AA	.18	.14	.11
3-DPMS-6D33	.0033	V	.18	.14	.11
3-DPMS-6D47	.0047	M	.18	.14	.11
3-DPMS-6D68	.0068	N	.18	.14	.11
3-DPMS-6S1	.01	O	.18	.14	.11
3-DPMS-6S22	.022	P	.18	.14	.11
3-DPMS-6S33	.033	Q	.24	.18	.14
3-DPMS-6S47	.047	R	.27	.20	.16
3-DPMS-6S68	.068	S	.30	.22	.17
3-DPMS-6P1	.1	T	.36	.26	.20
3-DPMS-6P22	.22	U	.51	.38	.30

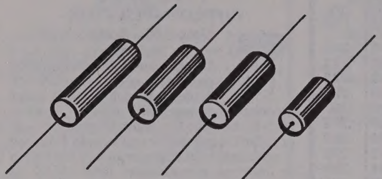
1600 V-DC WRKG.

3-DPMS-16D1	.001	BB	.21	.16	.13
3-DPMS-16D22	.0022	CC	.24	.17	.13
3-DPMS-16D33	.0033	DD	.24	.18	.14
3-DPMS-16D47	.0047	EE	.27	.19	.15
3-DPMS-16D68	.0068	FF	.27	.20	.15
3-DPMS-16S1	.01	GG	.30	.22	.17
3-DPMS-16S22	.022	HH	.36	.27	.21
3-DPMS-16S33	.033	II	.42	.32	.25
3-DPMS-16S47	.047	JJ	.48	.36	.28

DPMS CASE SIZES. DIA. x L.

A	.370" x .855"	N	.430" x .690"
B	.450" x .855"	O	.390" x .870"
C	.470" x 1.180"	P	.470" x .870"
D	.590" x 1.300"	Q	.430" x 1.150"
E	.730" x 1.600"	R	.490" x 1.150"
F	.390" x .660"	S	.540" x 1.300"
G	.400" x .855"	T	.640" x 1.300"
H	.415" x 1.150"	U	.750" x 1.560"
I	.520" x 1.180"	V	.370" x .660"
J	.620" x 1.560"	W	.390" x .660"
K	.850" x 1.600"	X	.355" x .850"
L	.370" x .690"	Y	.410" x .850"
M	.400" x .690"	Z	.510" x .850"
AA	.340" x .660"	FF	.485" x 1.18"
BB	.350" x .870"	GG	.525" x 1.18"
CC	.420" x .870"	HH	.585" x 1.60"
DD	.480" x .870"	II	.695" x 1.60"
EE	.540" x .870"	JJ	.785" x 1.60"

C-D ELECTROLYTICS



SINGLE SECTION CAPACITORS

•Types BR and WBR are compact aluminum cased, insulated DC electrolyt
capacitors. The case is spun over a rubber-bakelite plug to provide an effe
tive hermetic seal. These capacitors, designed to give the greatest volumetr
efficiency, offer the maximum capacitance in the smallest possible case siz
Both types feature etched cathode and all-welded construction for excelle
reliability. Operating temperature range is -40°C to +85°C (-40°F to +185°
up to 450 volts and to +65°C (+149°F) for higher voltages. Type BR h
cardboard sleeve. Type WBR has plastic sleeve. Listing is for WBR Series, *I
dicates capacitors that are still available in the BR Series, call or write f
complete specifications and prices. Tolerance (WBR Series): 3 to 50V DC
-10% +150%; 51 to 350V DCW, -10% +100%; 351 to 700V DCW, -10% +50

6V-DC WRKG.

Cat. 3- ★	Cap. Mfd.	Size D x L		Net 1-24	25-49
WBR1000-6*	1000	E	N	$1.14	$0.89
WBR2000-6	2000	G	N	1.38	1.04

10V-DC WRKG.

WBR3000-10	3000	G	P	2.10	1.57
WBR4000-10	4000	I	P	2.52	1.88
WBR5000-10	5000	I	Q	3.00	2.25
WBR10000-10	10000	K	V	4.05	3.04

16V-DC WRKG.

WBR100-16*	100	B	G	.69	.52
WBR250-16*	250	C	K	.90	.68
WBR500-16*	500	D	N	1.08	.81
WBR1000-16*	1000	E	P	1.38	1.07
WBR2000-16*	2000	G	Q	1.68	1.26
WBR3000-16*	3000	G	T	2.37	1.82
WBR4000-16	4000	I	T	3.00	2.25
WBR5000-16	5000	K	R	3.27	2.45
WBR10000-16	10000	GG	AA	5.19	3.89

25V-DC WRKG.

WBR10-25	10	A	D	.57	.43
WBR25-25	25	B	E	.60	.45
WBR50-25	50	B	G	.63	.47
WBR100-25*	100	C	G	.75	.56
WBR250-25*	250	D	N	1.05	.79
WBR500-25*	500	E	N	1.41	1.06
WBR1000-25*	1000	G	P	2.37	1.78
WBR2000-25*	2000	G	T	2.91	2.18

35V-DC WRKG.

WBR100-35	100	C	K	.75	.56
WBR150-35	150	D	L	.84	.63
WBR300-35	300	E	L	1.02	.79
WBR500-35	500	E	N	1.44	1.08
WBR1000-35	1000	G	P	2.40	1.80
WBR2000-35	2000	I	T	3.21	2.40
WBR3000-35	3000	K	T	3.60	2.70
WBR5500-35	5500	GG	AA	5.40	4.05

50V-DC WRKG.

WBR1-50	1	A	D	.51	.38
WBR2-50	2	A	D	.51	.38
WBR5-50	5	A	D	.57	.42
WBR10-50*	10	C	E	.57	.42
WBR25-50*	25	C	E	.60	.44
WBR35-50*	35	C	G	.63	.47
WBR50-50*	50	C	K	.72	.54
WBR100-50*	100	D	N	.78	.59
WBR125-50	125	D	N	.81	.61
WBR150-50*	150	E	L	.87	.65
WBR250-50*	250	E	N	1.05	.83
WBR500-50*	500	G	P	1.44	1.10
WBR1000-50*	1000	I	Q	2.49	1.84
WBR1500-50*	1500	K	R	3.00	2.26
WBR2000-50*	2000	K	V	3.45	2.59
WBR3000-50	3000	K	DD	3.90	2.92
WBR5000-50	5000	HH	BB	5.85	4.38

75V-DC WRKG.

WBR150-75	150	E	N	.96	.71
WBR275-75	275	G	P	1.32	.99
WBR500-75	500	I	Q	2.19	1.64
WBR1000-75	1000	K	T	3.75	2.81
WBR2000-75	2000	HH	U	5.25	3.93

100V-DC WRKG.

WBR400-100	400	I	T	1.80	1.35
WBR600-100	600	K	V	2.70	2.01
WBR1000-100	1000	HH	DD	4.05	3.03
WBR1500-100	1500	HH	BB	4.35	3.26
WBR2000-100	2000	HH	EE	5.70	4.26

Continued In Next Column

150V-DC WRKG.

Cat. 3- ★	Cap. Mfd.	Size D x L		Net 1-24	25-49
WBR4-150*	4	B	G	$0.57	$0.43
WBR5-150	5	C	E	.57	.43
WBR8-150*	8	C	G	.60	.45
WBR10-150*	10	C	I	.63	.46
WBR16-150	16	C	K	.66	.49
WBR20-150*	20	C	M	.66	.50
WBR30-150*	30	C	O	.72	.54
WBR40-150*	40	E	N	.78	.59
WBR50-150*	50	E	N	.81	.61
WBR60-150*	60	E	N	.84	.63
WBR80-150*	80	G	N	.90	.68
WBR100-150*	100	G	P	.99	.74
WBR150-150*	150	I	P	1.08	.81
WBR160-150	160	I	P	1.08	.81
WBR200-150*	200	I	Q	1.32	.99
WBR250-150	250	K	P	1.65	1.24
WBR300-150*	300	K	R	1.80	1.35
WBR350-150	350	K	R	1.89	1.41
WBR500-150	500	GG	T	3.15	2.35

180V-DC WRKG.

WBR125-180	125	G	T	1.20	.91
WBR225-180	225	I	T	1.62	1.21
WBR260-180	260	K	R	2.22	1.66
WBR400-180	400	GG	T	2.94	2.20

250V-DC WRKG.

WBR4-250*	4	D	L	.63	.47
WBR8-250*	8	D	N	.72	.53
WBR12-250*	12	D	N	.75	.56
WBR16-250*	16	E	L	.81	.61
WBR20-250*	20	G	L	.84	.63
WBR30-250*	30	G	N	.90	.68
WBR40-250*	40	E	P	.93	.73
WBR50-250*	50	G	P	1.08	.81
WBR60-250*	60	G	Q	1.08	.83
WBR80-250*	80	I	P	1.20	.90
WBR100-250*	100	I	Q	1.29	.97
WBR160-250	160	K	R	1.68	1.26
WBR225-250	225	K	V	2.10	1.58
WBR300-250	300	K	AA	3.15	2.35
WBR450-250	450	HH	X	3.60	2.70

350V-DC WRKG.

WBR4-350*	4	D	L	.66	.50
WBR8-350*	8	E	L	.72	.54
WBR20-350*	20	G	N	.90	.68
WBR40-350*	40	G	P	1.05	.81
WBR60-350	60	G	T	1.17	.90
WBR100-350*	100	K	Q	1.47	1.10
WBR160-350	160	GG	T	2.34	1.76
WBR200-350	200	K	DD	2.37	1.78
WBR250-350	250	GG	AA	3.12	2.34

450V-DC WRKG.

WBR1-450*	1	E	L	.69	.51
WBR2-450*	2	E	L	.69	.52
WBR4-450*	4	E	L	.72	.54
WBR5-450	5	E	L	.75	.56
WBR8-450*	8	G	L	.78	.59
WBR10-450*	10	G	L	.78	.59
WBR12-450	12	G	L	.84	.63
WBR16-450*	16	G	N	.90	.68
WBR20-450*	20	G	P	.96	.72
WBR30-450*	30	I	P	1.05	.79
WBR40-450*	40	I	Q	1.11	.83
WBR50-450	50	I	T	1.29	.97
WBR60-450*	60	K	R	1.44	1.08
WBR80-450*	80	K	V	1.68	1.26
WBR100-450*	100	K	Z	1.98	1.49
WBR120-450	120	GG	W	2.07	1.55
WBR160-450	160	GG	DD	2.85	2.14
WBR225-450	225	HH	BB	4.02	3.01

Continued In Next Column

500V-DC WRKG.

Cat. 3- ★	Cap. Mfd.	Size D x L		Net 1-24	2
WBR1-500	1	D	L	$0.69	$0.5
WBR3-500	3	D	N	.72	.5
WBR5-500	5	E	L	.78	.5
WBR8-500	8	G	L	.82	.
WBR10-500	10	E	P	.81	.
WBR16-500	16	G	P	.93	.
WBR20-500	20	G	Q	.96	.
WBR30-500	30	I	P	1.05	.8
WBR40-500	40	I	T	1.56	1.
WBR60-500	60	K	I	1.92	1.

600V-DC WRKG.

WBR4-600	4	F	S	1.44	1.
WBR8-600	8	H	S	1.68	1.
WBR10-600	10	H	Y	1.80	1.
WBR16-600	16	J	Y	2.10	1.5
WBR20-600	20	J	CC	2.31	1.

700V-DC WRKG.

WBR10-700	10	J	Y	1.86	1.
WBR16-700	16	J	FF	2.25	1.

★Include complete Cat. No. when orderin
i.e. 3-WBR1000-6.

D (Dia.) x L (Lgth.) Dimension Cod

A	1/4”	R	2 -3/16
B	5/16”	S	2-7/16
C	3/8”	T	2-1/2”
D	1/2”	U	2-9/16
E	5/8”	V	2-11/1
F	11/16”	W	3”
G	3/4”	X	3-1/16
H	13/16”	Y	3-3/16
I	7/8”	Z	3-7/16
J	15/16”	AA	3-9/16
K	1”	BB	3-5/8”
L	1-1/16”	CC	3-11/1
M	1-1/4”	DD	4-1/16
N	1-7/16”	EE	4-1/8”
O	1-1/2”	FF	4-5/16
P	1-11/16”	GG	1-1/8”
Q	2”	HH	1-3/8”

MALLORY

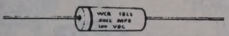
NON-POLAR SINGLE SEC. ELECTROLYTIC

Metal tubulars with insulating sleeve. Te
perature range: –20°C–+85°C. Toleranc
–10%, +100%.

Cat. 47-	Cap. uF.	VNP	Size, In. Dia. x Lg.	N E
TCN105	5	10	11/16x1¼	$0.6
TCN108	8	10	9/16x1¼	.6
TCN1025	25	10	3/8x13/16	.7
TCN412	500	10	15/16x2	1.2
TCN501	1	50	9/16x1¼	.6
TCN503	3	50	9/16x1¼	.6
TCN505	5	50	9/16x1¼	.7
TCN5010	10	50	9/16x1¼	.7
TCN5099	100	50	15/16x1¾	1.4
TCN510	4	150	9/16x1¼	.7
TCN1512	12	150	5/8x1¾	.9
TCN1551	50	150	15/16x2¼	1.1

CORNELL DUBILIER CAPACITORS

TYPE WCR



FILM WRAP POLYCARBONATE

elatively recent development in capacitor lectrics, polycarbonate offers characteris- s similar to polystyrene and is preferred many applications. It features a higher erating temperature range from -55°C to 5°C without derating and to +125C with % voltage derating, overcoming one of the itations of polystyrene units. Measured 1000Hz. the average capacitance change within -1%; -2% of the 25C value oughout the temperature range. The WCR tures construction similar to the type IF. All are ±10% tolerance.

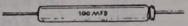
100 VDCW

t. .	Cap. Mfd.	Size D x L	Net 1-24	25-49
VCR-1D1	.001	.200x15/16	$.48	$.35
VCR-1D22	.0022	.220x15/16	.48	.35
VCR-1D33	.0033	.260x15/16	.48	.35
VCR-1D47	.0047	.290x15/16	.48	.35
VCR-1D68	.0068	.290x15/16	.48	.35
VCR-1S1	.01	.235x¾	.48	.35
VCR-1S15	.015	.245x¾	.48	.35
VCR-1S22	.022	.295x¾	.48	.36
VCR-1S33	.033	.345x¾	.51	.38
ICR-1S47	.047	.395x¾	.54	.41
ICR-1S68	.068	.415x7/8	.57	.43
ICR-1P1	.1	.450x1	.63	.47
ICR-1P15	.15	.545x1	.69	.52
ICR-1P22	.22	.590x1-1/8	.78	.59
ICR-1P33	.33	.645x1-3/8	.93	.70
ICR-1P47	.47	.735x1-5/8	1.08	.81
ICR-1P68	.68	.765x1-7/8	1.26	.93
ICR-1W1	1.0	.925x1-7/8	1.71	1.27

200 VDCW

ICR-2D1	.001	.200x15/16	$.48	$.35
ICR-2D22	.0022	.220x15/16	.48	.35
ICR-2D33	.0033	.260x15/16	.48	.35
ICR-2D47	.0047	.290x15/16	.48	.35
ICR-2D68	.0068	.290x15/16	.48	.35
ICR-2S1	.01	.290x15/16	.48	.35
ICR-2S15	.015	.320x15/16	.51	.38
ICR-2S22	.022	.385x15/16	.57	.42
ICR-2S33	.033	.465x15/16	.63	.46
ICR-2S47	.047	.405x1-5/16	.69	.51
ICR-2S68	.068	.485x1-5/16	.78	.57
ICR-2P1	.1	.585x1-5/16	.84	.63
ICR-2P15	.15	.700x1-5/16	.96	.72
ICR-2P22	.22	.675x1-7/8	1.11	.82
ICR-2P33	.33	.815x1-7/8	1.29	.96
ICR-2P47	.47	.950x1-7/8	1.47	1.10
ICR-2P68	.68	1.000x2-3/8	1.71	1.28

TYPE UHL



ALUMINUM ELECTROLYTICS

Extremely broad temperature range -55°C to +125°C. Voltage ratings at +125°C range from 5 VDCW thru 200 VDCW. All welded, aluminum electrolytic capacitors are polarized, etched foil construction. Meets or exceeds requirements of MIL-C-39018. Ideally suited for use in by-pass, filtering, or coupling applications at wide operating temperatures. Tolerance is -10% +75%.

Cat. No.	Volts DCW	Cap. Mfd.	†	Net 1-24	25-49
3-UHL-140-5	5	140	A	$2.15	$1.44
3-UHL-220-5	5	220	B	2.30	1.54
3-UHL-270-5	5	270	C	3.00	2.00
3-UHL-390-5	5	390	D	4.50	3.00
3-UHL-560-5	5	560	E	4.60	3.08
3-UHL-820-5	5	820	F	4.95	3.30
3-UHL-1000-5	5	1000	G	6.44	4.29
3-UHL-100-7	7	100	A	2.15	1.44
3-UHL-180-7	7	180	B	2.30	1.54
3-UHL-220-7	7	220	C	3.00	2.00
3-UHL-330-7	7	330	D	4.50	3.00
3-UHL-470-7	7	470	E	4.60	3.08
3-UHL-680-7	7	680	F	4.95	3.30
3-UHL-820-7	7	820	G	6.44	4.29
3-UHL-95-10	10	95	A	2.15	1.44
3-UHL-150-10	10	150	B	2.30	1.54
3-UHL-180-10	10	180	C	3.00	2.00
3-UHL-270-10	10	270	D	4.50	3.00
3-UHL-390-10	10	390	E	4.60	3.08
3-UHL-560-10	10	560	F	4.95	3.30
3-UHL-680-10	10	680	G	6.44	4.29
3-UHL-50-20	20	50	A	2.15	1.44
3-UHL-82-20	20	82	B	2.30	1:54
3-UHL-100-20	20	100	C	3.00	2.00
3-UHL-120-20	20	120	D	4.50	3.00
3-UHL-150-20	20	150	D	4.50	3.00
3-UHL-220-20	20	220	E	4.60	3.08
3-UHL-330-20	20	330	F	4.95	3.30
3-UHL-390-20	20	390	G	6.44	4.29
3-UHL-20-40	40	20	A	2.15	1.44
3-UHL-33-40	40	33	B	2.30	1.54
3-UHL-47-40	40	47	C	3.00	2.00
3-UHL-56-40	40	56	D	4.50	3.00
3-UHL-68-40	40	68	D	4.50	3.00
3-UHL-100-40	40	100	E	4.60	3.08
3-UHL-150-40	40	150	F	4.95	3.30
3-UHL-180-40	40	180	G	6.44	4.29

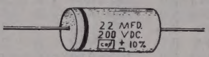
Continued in next column.

TYPE UHL CONTINUED

Cat. No.	Volts DCW	Cap. Mfd.	†	Net 1-24	25-49
3-UHL-15-60	60	15	A	$2.15	$1.44
3-UHL-22-60	60	22	B	2.30	1.54
3-UHL-33-60	60	33	C	3.00	2.00
3-UHL-12-75	75	12	B	2.30	1.54
3-UHL-15-75	75	15	C	3.00	2.00
3-UHL-22-75	75	22	D	4.50	3.00
3-UHL-33-75	75	33	E	4.60	3.08
3-UHL-47-75	75	47	F	4.95	3.30
3-UHL-68-75	75	68	G	6.44	4.29
3-UHL-6-100	100	6	A	2.15	1.44
3-UHL-8.2-100	100	8.2	B	2.30	1.54
3-UHL-12-100	100	12	C	3.00	2.00
3-UHL-18-100	100	18	D	4.50	3.00
3-UHL-22-100	100	22	E	4.60	3.08
3-UHL-33-100	100	33	F	4.95	3.30
3-UHL-56-100	100	56	G	6.44	4.29
3-UHL-4-150	150	4	A	2.15	1.44
3-UHL-6-150	150	6	B	2.30	1.54
3-UHL-8-150	150	8	C	3.00	2.00
3-UHL-13-150	150	13	D	4.50	3.00
3-UHL-17-150	150	17	E	4.60	3.08
3-UHL-26-150	150	26	F	4.95	3.30
3-UHL-39-150	150	39	G	6.44	4.29
3-UHL-3.3-200	200	3.3	A	2.15	1.44
3-UHL-5.6-200	200	5.6	B	2.30	1.54
3-UHL-6.8-200	200	6.8	C	3.00	2.00
3-UHL-10-200	200	10	D	4.50	3.00
3-UHL-12-200	200	12	E	4.60	3.08
3-UHL-22-200	200	22	F	4.95	3.30
3-UHL-27-200	200	27	G	6.44	4.29

† UHL CASE SIZES

A.	3/8x13/16"	E.	3/8x1-5/8"
B.	3/8x15/16"	F.	3/8x2-3/16"
C.	3/8x1-1/8"	G.	3/8x2-11/16"
D.	3/8x1-3/8"		....



MINIATURE WMF

GENERAL PURPOSE MYLAR WRAP

The tough film wrap unit is priced economically enough to be used in commercial equipment and is of sufficiently high quality to be used extensively in computers, industrial electronic equipment and military gear. The film p unit features epoxy end-seals bonded to the bright yellow film wrapper and to the leads to assure excellent moisture resistance. erating temperature range is to 125°C, -55°C to +85°C at full rated voltage; to +100°C, derated 10% and to +125°C. derated 50%. ndard tolerance is 10%. Note: Military Grad CTM type available to MIL specs. ★Include complete Cat. No., i.e., 3-WMF-1D1.

	100V DCW			200V DCW			400V DCW			600V DCW		
. 1.	Cat. No. 3-WMF-★	Size D x L	Net 1-24	Cat. No. 3-WMF-★	Size D x L	Net 1-24	Cat. No. 3-WMF-★	Size D x L	Net 1-24	Cat. No. 3-WMF-★	Size D x L	Net 1-24
1	1D1	.156x½"	$.27	2D1	.156x½"	$.27	4D1	.156x5/8"	$.30	6D1	.170x¾"	$.33
15	1D15	.156x½"	.27	2D15	.156x½"	.27	4D15	.156x5/8"	.30	6D15	.170x¾"	.33
22	1D22	.156x½"	.27	2D22	.156x½"	.27	4D22	.156x5/8"	.30	6D22	.187x¾"	.33
33	1D33	.156x½"	.27	2D33	.160x½"	.27	4D33	.190x5/8"	.30	6D33	.203x¾"	.33
47	1D47	.156x½"	.27	2D47	.170x½"	.27	4D47	.200x5/8"	.30	6D47	.234x¾"	.33
68	1D68	.175x½"	.27	2D68	.200x½"	.27	4D68	.250x5/8"	.30	6D68	.265x¾"	.33
	1S1	.200x½"	.27	2S1	.230x½"	.27	4S1	.300x5/8"	.30	6S1	.290x¾"	.33
5	1S15	.235x½"	.27	2S15	.290x½"	.27	4S15	.360x5/8"	.30	6S15	.312x7/8"	.33
2	1S22	.275x5/8"	.27	2S22	.260x5/8"	.27	4S22	.320x¾"	.30	6S22	.335x7/8"	.33
3	1S33	.300x5/8"	.27	2S33	.270x¾"	.27	4S33	.350x7/8"	.30	6S33	.350x1"	.33
7	1S47	.265x¾"	.27	2S47	.320x¾"	.27	4S47	.400x7/8"	.30	6S47	.415x1"	.33
8	1S68	.280x¾"	.30	2S68	.350x¾"	.30	4S68	.390x1"	.33	6S68	.500x1"	.36
	1P1	.290x7/8"	.30	2P1	.410x7/8"	.36	4P1	.465x1"	.33	6P1	.520x1-3/8"	.45
	1P15	.335x7/8"	.30	2P15	.500x7/8"	.36	4P15	.515x1¼"	.36	6P15	.625x1-3/8"	.45
	1P22	.385x1"	.33	2P22	.500x1-1/8"	.39	4P22	.565x1-3/8"	.42	6P22	.660x1-5/8"	.54
	1P33	.415x1-1/8"	.39	2P33	.550x1-1/8"	.45	4P33	.600x1-5/8"	.66	6P33	.687x2"	.90
	1P47	.475x1¼"	.45	2P47	.600x1¼"	.51	4P47	.700x1-5/8"	.78	6P47	.855x2"	1.14
	1P68	.570x1¼"	.60	2P68	.650x1-5/8"	.60	4P68	.790x1¾"	.96	6P68	.970x2"	1.53
	1W1	.625x1½"	.84	2W1	.750x1¾"	.84	4W1	.875x2"	1.14	6W1	1.165x2½"	2.43
5	1W1P25	.690x1½"	.96	2W1P25	.825x1¾"	.96	4W1P25	.950x2"	1.26	6W1P25	1.340x2½"	2.61
	1W1P5	.770x1¾"	1.11	2W1P5	.900x1¾"	1.11	4W1P5	.975x2¼"	1.41	6W1P5	1.275x3"	3.15
	1W2	.995x1¾"	1.35	2W2	.980x1-7/8"	1.35	4W2	1.250x2¼"	1.86	6W2	1.460x3"	3.96

CDE CAPACITORS

T COND.

JL BKT.

HIGH VOLTAGE TYPE

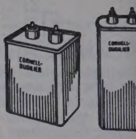
FOR TRANSMITTERS & INDUSTRIAL POWER SUPPLIES

Paper dielectric capacitors in Dykanol filled, drawn metal containers. Standard capacitance tolerance ±10%. Temperature range -55°C to +85°C. Available with JL, or JH (not illustrated) mounting bracket. JH is similar to JL but with mounting studs instead of mounting holes. Prices include mounting brackets. Please specify. Terminal height: A: 7/8", B: 1¼".

Cat. 3-★	Cap. Mfd.	DC / AC Volts Wrkg.	Term. Height	Dimensions (In.) W	D	H	Net 1-9
T6NP5	0.5	600/300	A	1-13/16	1-1/16	1-3/4	$5.69
T6NW1	1.0	600/330	A	1-13/16	1-1/16	2	5.90
T6NW2	2.0	600/330	A	1-12/16	1-1/16	2-3/4	6.30
T6NW3	3.0	600/330	A	1-13/16	1-1/16	3-5/8	6.73
T6NW4	4.0	600/330	A	2-1/2	1-3/16	3-1/4	7.16
T6NW6	6.0	600/330	A	2-1/2	1-3/16	4-1/4	7.56
T6NW8	8.0	600/330	A	3-3/4	1-1/4	3-3/8	7.95
T6NW10	10.0	600/330	A	3-3/4	1-1/4	4	9.90
T6NW15	15.0	600/330	A	3-3/4	1-3/4	4	13.32
T10NP1	0.1	1000/440	A	1-13/16	1-1/16	1-3/4	5.65
T10NP5	0.5	1000/440	A	1-13/16	1-1/16	1-3/4	5.87
T10NW1	1.0	1000/440	A	1-13/16	1-1/16	2-1/4	6.19
T10NW2	2.0	1000/440	A	1-13/16	1-1/16	3-1/2	6.66
T10NW4	4.0	1000/440	A	2-1/2	1-3/16	4	7.67
T10NW6	6.0	1000/440	A	3-3/4	1-1/4	3-3/4	9.03
T10NW8	8.0	1000/440	A	3-3/4	1-3/4	3-1/2	10.23
T10NW10	10.0	1000/440	A	3-3/4	1-3/4	4	11.52
T10NW15	15.0	1000/440	A	3-3/4	2-1/2	4-1/4	16.02
T15NP5	0.5	1500/660	A	1-13/16	1-1/16	2-1/4	6.08
T15NW1	1.0	1500/660	A	1-13/16	1-1/16	3	6.33
T15NW2	2.0	1500/660	A	2-1/2	1-3/16	3-3/4	7.27
T15NW4	4.0	1500/660	A	3-3/4	1-1/4	3-3/4	9.03
T20NP1	0.1	2000/700	A	1-13/16	1-1/16	1-3/4	7.41
T20NP5	0.5	2000/700	A	1-13/16	1-1/16	2-3/4	7.81
T20NW1	1.0	2000/700	B	2-1/2	1-3/16	3-1/4	7.99
T20NW2	2.0	2000/700	B	3-3/4	1-1/4	3-5/8	9.68
T20NW4	4.0	2000/700	B	3-3/4	2-1/4	3-5/8	13.14
T20NW5	5.0	2000/700	B	3-3/4	2-1/4	4-1/4	15.16
T25NW1	1.0	2500/800	B	3-3/4	1-3/4	2-3/4	10.55
T25NW4	4.0	2500/800	B	4-9/16	3-3/4	3	19.41
T30NP1	0.1	3000/950	B	2-1/2	1-3/16	2-1/4	7.38
T30NP5	0.5	3000/950	B	2-1/2	1-3/16	3-3/4	8.75
T30NW1	1.0	3000/950	B	3-3/4	2-1/4	3	11.08
T50NP5	0.5	5000/1600	B	3-3/4	2-1/4	4	13.21
T50NW1	1.0	5000/1600	B	4-9/16	3-3/4	4	18.96

★Include complete Cat. No. i.e. 3-T6NP5.

CAPACITORS FOR SCR COMMUTATION APPLICATIONS



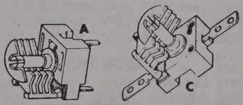
Hermetically sealed oil-paper dielectric capacitors ideal for development and breadboard work with square wave circuit applications including SCR commutation. Bonded extended foil construction assures minimum inductance and low effective series resistance. All capacitors are furnished with 10/32 ceran insulated screw terminals. Circuit connections specifically design to handle high currents with low power loss. Capacitance stabili ±2.5% from -55°C to 80°C. All ratings are furnished with UL gra grey paint finish. Data listed is based on 50 microsecond curre pulse width for operation within the voltage, current case tempe ture and ambient temperature limits. Terminal height: 1.25". * dicates metalized paper dielectric.

Cat. No.	Cap. Mfd.	Dimensions W"	D"	H"	Max. VRMS @ 60 Hz	Max. I RMS	Net 1-9	1
3-SCRG101	3	F	B	D	200	8.9	$8.60	$5.
3-SCRG102	5	F	B	I	200	12.8	9.40	5.
3-KMSCR103	10	O	A	P	165	39.5	19.80	12.
3-SCRG105	20	J	C	Q	200	37.7	27.72	17.
3-KMSCR104	20	O	G	Q	165	43.1	14.56	9.
3-SCRG120	2	F	B	H	400	7.7	8.92	5.
3-SCRG121	3	F	B	K	400	10.4	9.92	6.
3-KMSCR108	5	O	A	R	330	28.4	19.60	12.
3-KMSCR109	10	O	G	Q	330	42.9	27.72	17.
3-KMSCR110	20	O	M	S	330	43.0	39.40	24.
3-SCRG131	1	F	B	D	500	5.1	8.32	5.
3-SCRG152	.5	F	B	I	800	4.0	9.04	5.
3-SCRG153	1	F	B	N	800	6.6	9.60	6.
3-KMSCR114	2	O	A	R	700	18.2	19.52	12.
3-KMSCR115	3	O	G	Q	700	25.3	27.72	17.
3-SCR2025*	25	J	C	L	120	12.0	25.28	15.
3-SCR2050*	50	J	C	L	120	12.0	32.40	20.

DIMENSION CODE

A	1.25"	F	2.16"	K	2.81"	P	4.2
B	1.31"	G	2.25"	L	2.88"	Q	4.5
C	1.56"	H	2.31"	M	3.18"	R	4.7
D	2.06"	I	2.56"	N	3.44"	S	5.5
E	2.12"	J	2.69"	O	3.75"		

VARIABLE CAPACITORS

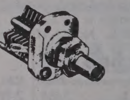


JOHNSON MINIATURE TYPE "U"

Designed to cut costs, improve performance and save valuable space in compact electronic equipment. They will provide long, trouble-free life and absolute freedom from moisture entrapment found in trimmer capacitors of the enclosed or solid dielectric type. Extra-heavy rotors and stators are machined from one piece of solid brass for mechanical stability and uniformity. All metal parts are silver plated. Insulation is steatite Grade L-4 or better. Available for printed circuit board (A), or 2-hole screw mounting (C). End-plate sizes: Fig. A .453" square; Fig. C. 433" x .453" high; All types are for screwdriver adjustment from rear end.

SINGLE SECTION TYPES

FIG. C Cat.	Net	FIG. A Cat.	Net	Mmfd. Range	Peak V.	Depth	Plates/ Section	Air Gap
71-189-501-4	$0.68	71-189-501-5	$0.64	4.2-1.2	650	27/64"	4	.010
71-189-502-4	.70	71-189-502-5	.66	6.7-1.3	650	15/32"	6	.010
71-189-503-4	.68	71-189-503-5	.64	9.2-1.4	650	33/64"	8	.010
71-189-504-4	.70	71-189-504-5	.66	11.6-1.5	650	9/16"	10	.010
71-189-505-4	.72	71-189-505-5	.68	14.1-1.7	650	39/64"	12	.010
71-189-506-4	.74	71-189-506-5	.70	16.7-1.8	650	43/64"	14	.010
71-189-507-4	.76	71-189-507-5	.72	19.3-2.0	500	23/32"	16	.010
71-189-508-4	.78	71-189-508-5	.74	21.9-2.2	500	49/64"	18	.010
71-189-509-4	.80	71-189-509-5	.76	24.5-2.4	500	13/16"	20	.010



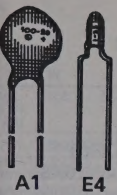
MIDGET TYPE "M"

Single Section. Requires 5/8" W. x ¾" Hi panel space. Mounts in ¼" hole. Steati end plates treated with DC-200. Low I ductance soldered plate construction. 3/1 dia. shaft has end slot. §Indicates plat per section.

Cat.	Mmfd.	§	N
71-160-102	5.0-1.5	5	$1.
71-160-104	8.7-1.8	9	1.
71-160-107	14.2-2.4	15	1.
71-160-110	19.6-2.7	21	1.
71-160-130	32.0-3.0	28	1.

E.F. JOHNSON CAPACITOR CATALOG AVAILABLE ON REQUEST

SPRAGUE CAPACITORS



SPRAGUE TYPE 196D DIPPED TANTALEX

Epoxy-dipped for good electrical and mechanical protection. High stability, very little capacitance change, even at outer limits of operating temperature range (-55°C to +85°C). Low dissipation factor permits higher ripples. Radial leads for mounting on printed boards. Capacitance Tolerance: ±10%. Capacitors listed have long leads. atalog numbers ending with A1 have straight leads with .125" pacing, catalog numbers ending with E4 have "Hockeystick" leads ith .250" spacing.

6 WVDC, 8 V SURGE

at. o.	Cap. µF	---Size--- Dia. x	H.	Net 1-49	50-99	100-499
91-196D685X9006HA1	6.8	.175	.375	$0.50	$0.32	$0.26
91-196D825X9006HA1	8.2	.175	.375	.50	.32	.26
91-196D336X9006JA1	33	.225	.425	.58	.37	.30
91-196D396X9006JA1	39	.225	.425	.58	.37	.30
91-196D566X9006KA1	56	.225	.450	.66	.42	.34
91-196D127X9006PE4	120	.400	.650	1.30	.82	.66
91-196D157X9006PE4	150	.400	.650	1.30	.82	.66
91-196D277X9006TE4	270	.400	.750	2.26	1.42	1.14
91-196D337X9006TE4	330	.400	.750	2.26	1.42	1.14

15 WVDC, 20 V SURGE

at. o.	Cap. µF	---Size--- Dia. x	H.	Net 1-49	50-99	100-499
91-196D335X9015HA1	3.3	.175	.375	.50	.32	.26
91-196D395X9015HA1	3.9	.175	.375	.50	.32	.26
91-196D156X9015JA1	15	.225	.425	.58	.37	.30
91-196D186X9015JA1	18	.225	.425	.58	.37	.30
91-196D226X9015KA1	22	.225	.450	.66	.42	.34
91-196D566X9015PE4	56	.400	.650	1.30	.82	.66
91-196D686X9015PE4	68	.400	.650	1.28	.80	.64
91-196D826X9015TE4	82	.400	.750	1.28	.80	.64
91-196D127X9015TE4	120	.400	.750	2.26	1.42	1.14
91-196D157X9015TE4	150	.400	.750	2.26	1.42	1.14

20 WVDC, 26 V SURGE

at. o.	Cap. µF	---Size--- Dia. x	H.	Net 1-49	50-99	100-499
91-196D275X9020HA1	2.7	.175	.375	.50	.32	.26
91-196D106X9020JA1	10	.225	.425	.58	.37	.30
91-196D126X9020JA1	12	.225	.425	.58	.37	.30
91-196D156X9020KA1	15	.225	.450	.64	.40	.32
91-196D186X9020KA1	18	.225	.450	.64	.40	.32
91-196D396X9020PE4	39	.400	.650	1.30	.82	.66
91-196D476X9020PE4	47	.400	.650	1.28	.80	.64
91-196D826X9020TE4	82	.400	.750	2.26	1.42	1.14
91-196D107X9020TE4	100	.400	.750	2.24	1.40	1.12

35 WVDC, 46 V SURGE

at. o.	Cap. µF	---Size--- Dia. x	H.	Net 1-49	50-99	100-499
91-196D104X9035HA1	.10	.175	.375	.48	.30	.24
91-196D124X9035HA1	.12	.175	.375	.50	.32	.26
91-196D154X9035HA1	.15	.175	.375	.50	.32	.26
91-196D184X9035HA1	.18	.175	.375	.50	.32	.26
91-196D224X9035HA1	.22	.175	.375	.50	.32	.26
91-196D274X9035HA1	.27	.175	.375	.50	.32	.26
91-196D334X9035HA1	.33	.175	.375	.50	.32	.26
91-196D394X9035HA1	.39	.175	.375	.50	.32	.26
91-196D474X9035HA1	.47	.175	.375	.50	.32	.26
91-196D564X9035HA1	.56	.175	.375	.50	.32	.26
91-196D684X9035HA1	.68	.175	.375	.50	.32	.26
91-196D824X9035HA1	.82	.175	.375	.50	.32	.26
91-196D105X9035HA1	1	.175	.375	.50	.32	.26
91-196D125X9035JA1	1.2	.225	.425	.50	.32	.26
91-196D155X9035JA1	1.5	.225	.425	.58	.37	.30
91-196D185X9035JA1	1.8	.225	.425	.58	.37	.30
91-196D225X9035JA1	2.2	.225	.425	.58	.37	.30
91-196D275X9035JA1	2.7	.225	.425	.58	.37	.30
91-196D335X9035JA1	3.3	.225	.425	.58	.37	.30
91-196D395X9035JA1	3.9	.225	.425	.58	.37	.30
91-196D475X9035JA1	4.7	.225	.425	.58	.37	.30
91-196D565X9035KA1	5.6	.225	.425	.66	.43	.34
91-196D685X9035KA1	6.8	.225	.425	.64	.40	.32
91-196D825X9035PE4	8.2	.225	.425	1.30	.82	.66
91-196D106X9035PE4	10	.400	.650	1.30	.82	.66
91-196D126X9035PE4	12	.400	.650	1.30	.82	.66
91-196D156X9035PE4	15	.400	.650	1.30	.82	.66
91-196D186X9035PE4	18	.400	.650	1.42	.90	.72
91-196D226X9035PE4	22	.400	.650	1.42	.90	.72
91-196D276X9035TE4	27	.400	.650	2.26	1.42	1.14
91-196D336X9035TE4	33	.400	.750	2.26	1.42	1.14
91-196D396X9035TE4	39	.400	.750	2.26	1.42	1.14
91-196D476X9035TE4	47	.400	.750	2.26	1.42	1.14

50 WVDC, 65 V SURGE

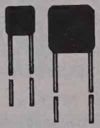
at. o.	Cap. µF	---Size--- Dia. x	H.	Net 1-49	50-99	100-499
1-196D104X9050HA1	.10	.175	.375	.68	.43	.34
1-196D124X9050HA1	.12	.175	.375	.70	.45	.36
1-196D154X9050HA1	.15	.175	.375	.70	.45	.36
1-196D184X9050HA1	.18	.175	.375	.70	.45	.36
1-196D224X9050HA1	.22	.175	.375	.68	.43	.34
1-196D274X9050HA1	.27	.175	.375	.70	.45	.36

CONTINUED IN NEXT COLUMN

50 WVDC CONTINUED

Cat. No.	Cap. µF	---Size--- Dia. x	H.	Net 1-49	50-99	100-499
291-196D334X9050HA1	.33	.175	.375	$0.70	$0.45	$0.36
291-196D394X9050HA1	.39	.175	.375	.70	.45	.36
291-196D474X9050HA1	.47	.175	.375	.70	.45	.36
291-196D564X9050HA1	.56	.175	.375	.70	.45	.36
291-196D684X9050HA1	.68	.175	.375	.70	.45	.36
291-196D824X9050HA1	.82	.175	.375	.70	.45	.36
291-196D105X9050HA1	1	.175	.375	.68	.43	.34
291-196D125X9050JA1	1.2	.225	.425	.78	.50	.40
291-196D155X9050JA1	1.5	.225	.425	.78	.50	.40
291-196D185X9050JA1	1.8	.225	.425	.78	.50	.40
291-196D225X9050JA1	2.2	.225	.425	.78	.50	.40
291-196D275X9050JA1	2.7	.225	.425	.78	.50	.40
291-196D335X9050JA1	3.3	.225	.425	.76	.48	.38
291-196D395X9050KA1	3.9	.225	.425	.86	.55	.44
291-196D475X9050KA1	4.7	.225	.425	.86	.55	.44
291-196D565X9050PE4	5.6	.225	.450	1.32	.90	.68
291-196D685X9050PE4	6.8	.225	.450	1.30	.88	.66
291-196D825X9050PE4	8.2	.400	.650	1.32	.90	.68
291-196D106X9050PE4	10	.400	.650	1.32	.90	.68
291-196D126X9050PE4	12	.400	.650	1.32	.90	.68
291-196D156X9050PE4	15	.400	.650	1.30	.88	.66
291-196D186X9050TE4	18	.400	.750	2.68	1.70	1.35
291-196D226X9050TE4	22	.400	.750	2.68	1.70	1.35

SPRAGUE MONOLYTHIC® CERAMIC CAPACITORS



Monolythic® capacitors in a variety of body formulations, capacitance and sizes. Capacitors are made by spraying alternate layers of ceramic dielectric material and metallic electrodes, then firing into a single, homogeneous block. Mechanical damage and moisture are protected against by a tough resin coating. Temperature Range: +10°C to +85°C. Tolerance: +80 -20%.

TYPE 1C 50 WVDC

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-1C023103D8500C4	.01	A	$0.756	$0.567	$0.378
291-1C023153D8500C4	.015	A	.756	.567	.378
291-1C023223D8500C4	.022	A	.756	.567	.378
291-1C023333D8500C4	.033	A	.756	.567	.378
291-1C023473D8500C4	.047	A	.756	.567	.378
291-1C023683D8500C4	.068	A	.808	.606	.404
291-2C023104D8500C4	.10	B	.808	.606	.404

TYPE 2C 50 WVDC

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-2C023103D8500C4	.01	C	.676	.507	.338
291-2C023153D8500C4	.015	C	.676	.507	.338
291-2C023223D8500C4	.022	C	.676	.507	.338
291-2C023333D8500C4	.033	C	.676	.507	.338
291-2C023473D8500C4	.047	C	.676	.507	.338
291-2C023683D8500C4	.068	C	.676	.507	.338
291-2C023104D8500C4	.10	C	.676	.507	.338
291-2C023154D8500C4	.15	D	.836	.627	.418
291-2C023224D8500C4	.22	D	1.008	.869	.580
291-2C023334D8500C4	.33	F	1.008	.869	.580
291-2C023474D8500C4	.47	F	1.008	.869	.580
291-2C023684D8500C4	.68	F	1.420	1.065	.710
291-2C023105D8500C4	1.0	F	1.978	1.484	.989

TYPE 3C 50 WVDC

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-3C023103D8500C4	.01	H	.676	.507	.338
291-3C023153D8500C4	.015	H	.676	.507	.338
291-3C023223D8500C4	.022	H	.676	.507	.338
291-3C023333D8500C4	.033	H	.676	.507	.338
291-3C023473D8500C4	.047	H	.676	.507	.338
291-3C023683D8500C4	.068	H	.676	.507	.338
291-3C023104D8500C4	.10	H	.676	.507	.338
291-3C023154D8500C4	.15	H	.836	.627	.418
291-3C023224D8500C4	.22	H	1.008	.756	.504
291-3C023334D8500C4	.33	I	1.008	.756	.504
291-3C023474D8500C4	.47	I	1.008	.756	.504
291-3C023684D8500C4	.68	M	1.420	1.065	.710
291-3C023105D8500C4	1.0	M	1.720	1.290	.860
291-3C023155D8500C4	1.5	M	1.832	1.374	.916

TYPE 5C 50 WVDC

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-5C023104D8500C5			.676	.507	.338
291-5C023314D8500C5			.836	.627	.418
291-5C023224D8500C5			1.008	.756	.504
291-5C023334D8500C5			1.008	.756	.504
291-5C023474D8500C5			1.008	.756	.504
291-5C023684D8500C5			1.420	1.065	.710
291-5C023105D8500C5			1.720	1.290	.860

CONTINUED ON NEXT PAGE

SPRAGUE CAPACITORS

MONOLYTHICS CONTINUED

TYPE 5C 50 WVDC

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-5C023155D8500C5	1.5	S	$1.852	$1.394	$0.936
291-5C023225D8500C5	2.2	U	3.584	2.688	1.792
291-5C023335D8500C5	3.3	U	4.232	3.174	2.116
291-5C023475D8500C5	4.7	W	.720	.540	.360
291-5C023685D8500C5	6.8	W	.800	.600	.400

DIMENSIONS (In Inches)

Size Code	L	x W	x T	Size Code	L	x W	x T
A	.200	.200	.125	M	.400	.400	.150
B	.200	.200	.150	N	.500	.200	.125
C	.300	.200	.125	O	.500	.200	.150
D	.300	.200	.150	Q	.500	.296	.150
F	.300	.300	.150	S	.500	.400	.150
H	.390	.200	.125	U	.500	.500	.150
I	.390	.200	.150	W	.500	.500	.238

TYPE 7C MONOLYTHIC® CERAMIC CAPACITORS

Radial lead style especially designed for printed wiring board mounting. New phenolic terminal base with stand-off "feet" provides these advantages: no resin run-down on leads; uniform lead spacing; no dirt and moisture entrapment; degreasing fluid flows freely between capacitors and board. All capacitors listed rated at 50 WVDC. Tolerance: ±20%.

TEMPERATURE-COMPENSATING FORMULATION NPO

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-7C082510X0500D	51	D	$0.852	$0.644	$0.436
291-7C082560X0500D	56	D	.852	.644	.436
291-7C082620X0500D	62	D	.800	.605	.410
291-7C082750X0500D	75	D	.800	.605	.410
291-7C082820X0500D	82	D	.800	.605	.410
291-7C082910X0500D	91	D	.800	.605	.410
291-7C082101X0500D	100	D	.800	.605	.410
291-7C082111X0500D	110	D	.800	.605	.410
291-7C082121X0500D	120	D	.800	.605	.410
291-7C082131X0500D	130	D	.800	.605	.410
291-7C082151X0500D	150	D	.800	.605	.410
291-7C082161X0500D	160	D	.852	.644	.436
291-7C082181X0500D	181	D	.852	.644	.436
291-7C082201X0500D	200	D	.852	.644	.436
291-7C082221X0500D	220	D	.852	.644	.436
291-7C082241X0500D	240	D	.852	.644	.436
291-7C082271X0500D	270	D	.852	.644	.436
291-7C082301X0500D	300	D	.852	.644	.436
291-7C082331X0500D	330	D	.852	.644	.436
291-7C082361X0500D	360	D	.852	.644	.436
291-7C082391X0500D	390	D	.852	.644	.436
291-7C082431X0500D	430	D	.852	.644	.436
291-7C082471X0500D	470	D	.852	.644	.436
291-7C082511X0500D	510	D	.852	.644	.436

TEMPERATURE-COMPENSATING FORMULATION X7R

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-7C067122X0500D	1200	D	.740	.560	.380
291-7C067152X0500D	1500	D	.740	.560	.380
291-7C067182X0500D	1800	D	.740	.560	.380
291-7C067222X0500D	2200	D	.740	.560	.380
291-7C067272X0500D	2700	D	.740	.560	.380
291-7C067332X0500D	3300	D	.740	.560	.380
291-7C067392X0500D	3900	D	.740	.560	.380
291-7C067472X0500D	4700	D	.740	.560	.380
291-7C067562X0500D	5600	D	.740	.560	.380
291-7C067682X0500D	6800	D	.740	.560	.380
291-7C067822X0500D	8200	D	.820	.620	.420

GENERAL APPLICATION FORMULATION Z5U

Cat. No.	Cap. µF	Size Code	Net 1-49	50-99	100-499
291-7C023103X0500D	.010	D	$0.802	$0.606	$0.412
291-7C023153X0500D	.015	D	.802	.606	.412
291-7C023223X0500D	.022	D	.802	.606	.412
291-7C023333C0500D	.033	D	.802	.606	.412
291-7C023473X0500D	.047	D	.802	.606	.412
291-7C023683X0500D	.068	D	.802	.606	.412
291-7C023104X0500D	.10	D	.802	.606	.412
291-7C023154X0500D	.15	D	.984	.774	.504
291-7C023224X0500D	.22	D	1.182	.892	.603
291-7C023334X0500E	.33	E	1.182	.892	.603
291-7C023474X0500E	.47	E	1.182	.892	.603
291-7C023684X0500E	.68	E	1.650	1.242	.834
291-7C023105X0500E	1.0	E	1.995	1.501	1.006
291-7C023155X0500E	1.5	E	2.124	1.597	1.071
291-7C023225X0500F	2.2	F	4.139	3.108	2.078

Continued In Next Column

DIMENSIONS (In Inches)

Case Code	L	W	T	Case Code	L	W	T
D	.390	.275	.160	F	.535	.550	.26
E	.535	.550	.160				

TYPE PS ORANGE DROP®

DIPPED TUBULAR CAPACITORS

For general use, service and construction. Dual poly ester/paper dielectric impregnated with HCX® an double dipped in bright orange epoxy resin. Hard-rock coatin impervious to humidity and temperature. Solid wire leads.

200 V-DC WRKG.

Cat. No.	Mfd. Cap.	D x L	Net Ea.
291-2PS-S20	.02	Dc	$.21
291-2PS-S22	.022	Ec	.21
291-2PS-S47	.047	Ic	.21
291-2PS-S50	.05	Jc	.21
291-2PS-P10	.1	Kd	.24
291-2PS-P15	.15	Pd	.33
291-2PS-P20	.2	Re	.39
291-2PS-P22	.22	Se	.39
291-2PS-P25	.25	Te	.54
291-2PS-P33	.33	Tf	.54
291-2PS-P47	.47	Xf	.72
291-2PS-P50	.50	Yf	.72

400 V-DC WRKG.

Cat. No.	Mfd. Cap.	D x L	Net Ea.
291-4PS-S10	.01	FW	.18
291-4PS-S15	.015	IW	.21
291-4PS-S20	.02	Fc	.21
291-4PS-S22	.022	Gc	.21
291-4PS-S25	.025	Hc	.24
291-4PS-S30	.03	Ic	.24
291-4PS-S33	.033	Jc	.24
291-4PS-S40	.04	Gd	.24
291-4PS-S47	.047	Id	.24
291-4PS-S50	.05	Id	.24
291-4PS-S56	.056	Kd	.24
291-4PS-S68	.068	Md	.24
291-4PS-S75	.075	Md	.33
291-4PS-P10	.1	Qd	.33
291-4PS-P15	.15	Se	.39
291-4PS-P20	.20	Re	.54
291-4PS-P22	.22	Se	.54
291-4PS-P25	.25	Ue	.72

600 V-DC WRKG.

Cat. No.	Mfd. Cap.	D x L	Net Ea.
291-6PS-D10	.001	AW	.18
291-6PS-D12	.0012	AW	.18
291-6PS-D15	.0015	AW	.18
291-6PS-D18	.0018	AW	.18
291-6PS-D20	.002	AW	.18
291-6PS-D22	.0022	AW	.18
291-6PS-D25	.0025	AW	.18
291-6PS-D27	.0027	BW	.18
291-6PS-D30	.003	BW	.18
291-6PS-D33	.0033	CW	.18

600 V-DC CONT'D.

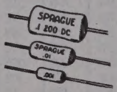
Cat. No.	Mfd. Cap.	D x L	Ne Ea
291-6PS-D39	.0039	DW	$.1
291-6PS-D40	.004	DW	.1
291-6PS-D47	.0047	EW	.1
291-6PS-D50	.005	EW	.1
291-6PS-D56	.0056	EW	.1
291-6PS-D60	.006	FW	.1
291-6PS-D68	.0068	FW	.1
291-6PS-D75	.0075	Cc	.1
291-6PS-D80	.008	Cc	.1
291-6PS-D82	.0082	Dc	.1
291-6PS-S10	.01	Ec	.1
291-6PS-S12	.012	Ec	.1
291-6PS-S15	.015	Gc	.2
291-6PS-S20	.02	Kc	.2
291-6PS-S22	.022	Kc	.2
291-6PS-S25	.025	Nc	.2
291-6PS-S27	.027	Hd	.2
291-6PS-S30	.03	Hd	.2
291-6PS-S33	.033	Jd	.2
291-6PS-S35	.035	Jd	.2
291-6PS-S39	.039	Kd	.2
291-6PS-S40	.04	Ld	.2
291-6PS-S47	.047	Nd	.2
291-6PS-S50	.05	Nd	.2
291-6PS-S56	.056	Od	.2
291-6PS-S60	.06	Pd	.2
291-6PS-S68	.068	Qd	.2
291-6PS-S75	.075	Pe	.2
291-6PS-S82	.082	Qe	.3
291-6PS-P10	.1	Te	.3
291-6PS-P15	.15	Vf	.4
291-6PS-P20	.20	Zf	.7
291-6PS-P22	.22	af	.7
291-6PS-P25	.25	bf	.8

1000 V-DC WRKG.

Cat. No.	Mfd. Cap.	D x L	Ne Ea
291-10PS-D10	.001	AW	.1
291-10PS-D15	.0015	BW	.1
291-10PS-D20	.002	DW	.1
291-10PS-D22	.0022	DW	.1
291-10PS-D30	.003	Bc	.1
291-10PS-D40	.004	Dc	.2
291-10PS-D47	.0047	Fc	.2
291-10PS-D50	.005	Fc	.2

ORANGE DROP® CASE SIZES.

A	21/64"	H	7/16"	O	35/64"	V	43/64"	c	7/8"
B	11/32"	I	29/64"	P	9/16"	W	11/16"	d	1-3/16
C	23/64"	J	15/32"	Q	37/64"	X	45/64"	e	1-5/16
D	3/8"	K	31/64"	R	19/32"	Y	23/32"	f	1-5/8"
E	25/64"	L	1/2"	S	39/64"	Z	3/4"	....	
F	13/32"	M	33/64"	T	5/8"	a	25/32"	....	
G	27/64"	N	17/32"	U	41/64"	b	13/16"	....	



192P PACER® FILMITE® 'E'

POLYESTER FILM DIELECTRIC EPOXY COATED CAPACITORS

Non-inductive. Controlled dimensions permit us of automatic insertion equipment for installin on printed wiring boards. Operating temp. range -55°C. to +85°C

200 V-DC WRKG.

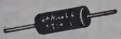
Cat. No.	Cap. Mfd.	Size Dia. x L.	Ea. 1-24	Ea. 25-49	Ea. 50-99	100 24
291-192P47192	.00047	9/64 x 5/16	$0.36	$0.27	$0.21	$0.1
291-192P56192	.00056	9/64 x 5/16	.36	.27	.21	.1
291-192P68192	.00068	9/64 x 5/16	.33	.24	.19	.1
291-192P82192	.00082	9/64 x 5/16	.33	.24	.19	.1
291-192P10292	.001	9/64 x 5/16	.30	.21	.17	.1
291-192P12292	.0012	9/64 x 5/16	.30	.21	.17	.1

CONTINUED ON NEXT PAGE

SPRAGUE CAPACITORS

200 V-DC WRKG. CONT'D.

Cat. No.	Cap. µF	Size Dia. x L.	Ea. 1-24	Ea. 25-49	Ea. 50-99	100-249
291-192P15292	.0015	9/64 x 5/16	$0.30	$0.21	$0.17	$0.13
291-192P22292	.0022	11/64 x 5/16	.30	.22	.17	.14
291-192P27292	.0027	11/64 x 5/16	.30	.22	.17	.14
291-192P33292	.0033	11/64 x 5/16	.30	.22	.17	.14
291-192P39292	.0039	11/64 x 7/16	.30	.22	.17	.14
291-192P47292	.0047	11/64 x 7/16	.30	.22	.17	.14
291-192P68292	.0068	11/64 x 7/16	.30	.23	.18	.14
291-192P10392	.01	11/64 x 1/2	.33	.24	.19	.15
291-192P12392	.012	7/32 x 7/16	.33	.25	.19	.15
291-192P15392	.015	7/32 x 7/16	.33	.25	.19	.16
291-192P18392	.018	7/32 x 9/16	.33	.25	.20	.16
291-192P22392	.022	7/32 x 9/16	.36	.26	.20	.16
291-192P27392	.027	15/64 x 9/16	.36	.27	.21	.17
291-192P33392	.033	15/64 x 9/16	.39	.29	.22	.18
291-192P39392	.039	19/64 x 1/2	.39	.30	.23	.19
291-192P47392	.047	19/64 x 1/2	.42	.31	.24	.20
291-192P68392	.068	19/64 x 5/8	.48	.35	.28	.22
291-192P10492	.1	21/64 x 5/8	.51	.38	.30	.24
291-192P12492	.12	21/64 x 7/8	.54	.40	.31	.25
291-192P15492	.15	21/64 x 7/8	.60	.45	.35	.28
291-192P22492	.22	21/64 x 1-1/8	.60	.51	.40	.32



TM DIFILM® MOLDED
LEAK-PROOF TUBULARS

Dual paper/polyester film capacitors with HCX® solid impregnant, in mica-filled, non-inflammable molded cases. They are rock-hard, leak and drip proof, need no derating up to 105°C. operation. Capacity tolerance ± 10%. ★When ordering give complete catalog number, i.e., 291-2TM-S20.

200 V-DC WRKG.

Cat. No. 291-★	Cap. µF	Size Dia. x L.	Ea. 1-24	Ea. 25-49	Ea. 50-99	100-Up
2TM-S20	.02	3/8" x 1¼"	$0.24	$0.17	$0.13	$0.10
2TM-S50	.05	3/8" x 1¼"	.24	.17	.13	.10
2TM-P10	.1	7/16" x 1¼"	.24	.18	.14	.12
2TM-P22	.22	5/8" x 1-7/8"	.48	.36	.28	.23
2TM-P47	.47	5/8" x 1-7/8"	.48	.36	.28	.23
2TM-M1	1.00	¾" x 2¼"	.84	.62	.48	.39
400 V-DC WRKG.						
4TM-S10	.01	5/16" x 1"	.21	.14	.11	.09
4TM-S20	.02	3/8" x 1¼"	.24	.17	.13	.10
4TM-S25	.025	3/8" x 1¼"	.24	.17	.13	.10
4TM-S50	.05	7/16" x 1¼"	.30	.22	.18	.14
4TM-S68	.068	½" x 1½"	.30	.22	.18	.14
4TM-P10	.1	½" x 1½"	.30	.22	.18	.14
4TM-P15	.15	5/8" x 1-7/8"	.48	.36	.28	.23
4TM-P25	.25	¾" x 2¼"	.84	.62	.48	.39
4TM-P50	.5	¾" x 2¼"	.84	.62	.48	.39
4TM-M1	1.00	1" x 2½"	1.08	.81	.63	.50
600 V-DC WRKG.						
6TM-D10	.001	5/16" x 1"	.21	.15	.12	.09
6TM-D25	.0025	5/16" x 1"	.21	.15	.12	.09
6TM-D50	.005	3/8" x 1¼"	.24	.17	.13	.10
6TM-D68	.0068	3/8" x 1¼"	.24	.17	.13	.10
6TM-S10	.01	3/8" x 1¼"	.24	.17	.13	.10
6TM-S15	.015	3/8" x 1¼"	.24	.17	.13	.10
6TM-S22	.022	7/16" x 1¼"	.24	.18	.14	.12
6TM-S33	.033	7/16" x 1¼"	.24	.18	.14	.12
6TM-S50	.05	½" x 1½"	.30	.22	.18	.14
6TM-S68	.068	½" x 1½"	.30	.22	.18	.14
6TM-P10	.1	5/8" x 1-7/8"	.48	.36	.28	.23
6TM-P15	.15	5/8" x 1-7/8"	.48	.36	.28	.23
6TM-P25	.25	¾" x 2¼"	.84	.62	.48	.39
6TM-P50	.5	1" x 2½"	1.08	.81	.63	.50
6TM-M1	1.00	1" x 2½"	1.56	1.17	.91	.73
1000 V-DC WRKG.						
10TM-D10	.001	5/16" x 1"	.21	.15	.12	.09
10TM-D15	.0015	5/16" x 1"	.21	.15	.12	.09
10TM-D22	.0022	3/8" x 1¼"	.24	.17	.14	.11
10TM-D50	.005	3/8" x 1¼"	.24	.17	.14	.11
10TM-D68	.0068	3/8" x 1¼"	.24	.17	.13	.10
10TM-S10	.01	7/16" x 1¼"	.24	.18	.14	.12
10TM-S15	.015	½" x 1½"	.30	.22	.18	.14
10TM-S22	.022	½" x 1½"	.30	.22	.18	.14
10TM-S35	.035	5/8" x 1-7/8"	.48	.36	.28	.23
10TM-S50	.05	5/8" x 1-7/8"	.48	.36	.28	.23
10TM-P10	.1	3/4" x 2-1/4"	.84	.62	.48	.39
1600 V-DC BUFFERS						
MB-D5	.005	½" x 1½"	.33	.25	.19	.15
MB-D6	.006	½" x 1½"	.33	.25	.19	.15
MB-D7	.007	½" x 1½"	.54	.39	.30	.24
MB-D8	.008	5/8" x 1-7/8"	.54	.39	.30	.24
MB-S1	.01	5/8" x 1-7/8"	.54	.39	.30	.24

150D TANTALEX®
SOLID ELECTROLYTE CAPACITORS

Miniature, hermetically sealed, metal cased capacitors. Solid electrolyte cannot leak or corrode. Capacity tolerance ± 10%. Operating temp. range -80°C. All have plastic sleeve. ★When ordering give complete catalog number.

6 VDCW

Cat. 291-150D-★	Cap. µF
224X9006A2	.22
274X9006A2	.27
334X9006A2	.33
394X9006A2	.39
474X9006A2	.47
564X9006A2	.56
684X9006A2	.68
824X9006A2	.82
105X9006A2	1.0
125X9006A2	1.2
155X9006A2	1.5
185X9006A2	1.8
225X9006A2	2.2
275X9006A2	2.7
335X9006A2	3.3
395X9006A2	3.9
475X9006A2	4.7
565X9006A2	5.6
685X9006A2	6.8
825X9006B2	8.2
106X9006B2	10
156X9006B2	15
186X9006B2	18
226X9006B2	22
276X9006B2	27
336X9006B2	33
396X9006B2	39
476X9006B2	47
566X9006B2	56
606X9006B2	60
686X9006R2	68
826X9006R2	82
107X9006R2	100
127X9006R2	120
157X9006R2	150
187X9006R2	180
227X9006S2	220
277X9006S2	270
337X9006S2	330
10 VDCW	
224X9010A2	.22
274X9010A2	.27
334X9010A2	.33
394X9010A2	.39
474X9010A2	.47
564X9010A2	.56
684X9010A2	.68
824X9010A2	.82
105X9010A2	1.0
125X9010A2	1.2
155X9010A2	1.5
185X9010A2	1.8
225X9010A2	2.2
275X9010A2	2.7
335X9010A2	3.3
395X9010A2	3.9
475X9010A2	4.7
565X9010B2	5.6
685X9010B2	6.8
825X9010B2	8.2
106X9010B2	10
156X9010B2	15
186X9010B2	18
226X9010B2	22
276X9010B2	27
336X9010B2	33
396X9010B2	39
406X9010B2	40
476X9010R2	47
566X9010R2	56
686X9010R2	68

10 VDCW CONT.

Cat. 291-150D-★	Cap. µF
826X9010R2	82
107X9010R2	100
127X9010R2	120
157X9010S2	150
187X9010S2	180
227X9010S2	220
15 VDCW	
224X9015A2	.22
274X9015A2	.27
334X9015A2	.33
394X9015A2	.39
474X9015A2	.47
564X9015A2	.56
684X9015A2	.68
824X9015A2	.82
105X9015A2	1.0
125X9015A2	1.2
155X9015A2	1.5
185X9015A2	1.8
225X9015A2	2.2
275X9015A2	2.7
335X9015A2	3.3
395X9015B2	3.9
475X9015B2	4.7
565X9015B2	5.6
685X9015B2	6.8
825X9015B2	8.2
106X9015B2	10
156X9015B2	15
186X9015B2	18
226X9015B2	22
276X9015R2	27
336X9015R2	33
396X9015R2	39
476X9015R2	47
566X9015R2	56
686X9015R2	68
826X9015S2	82
107X9015S2	100
127X9015S2	120
157X9015S2	150
20 VDCW	
472X9020A2†	.0047
562X9020A2†	.0056
682X9020A2†	.0068
822X9020A2†	.0082
103X9020A2†	.01
123X9020A2†	.012
153X9020A2†	.015
183X9020A2†	.018
223X9020A2†	.022
273X9020A2†	.027
333X9020A2	.033
393X9020A2	.039
473X9020A2	.047
563X9020A2	.056
683X9020A2	.068
823X9020A2	.082
104X9020A2	.10
154X9020A2	.15
184X9020A2	.18
224X9020A2	.22
274X9020A2	.27
334X9020A2	.33
394X9020A2	.39
474X9020A2	.47
564X9020A2	.56
684X9020A2	.68
824X9020A2	.82
105X9020A2	1.0
125X9020A2	1.2

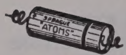
20 VDCW CONT.

Cat. 291-150D-★	Cap. µF
155X9020A2	1.5
185X9020A2	1.8
225X9020A2	2.2
275X9020B2	2.7
335X9020B2	3.3
395X9020B2	3.9
475X9020B2	4.7
565X9020B2	5.6
685X9020B2	6.8
825X9020B2	8.2
106X9020B2	10
156X9020B2	15
186X9020R2	18
226X9020R2	22
276X9020R2	27
336X9020R2	33
396X9020R2	39
476X9020R2	47
566X9020S2	56
686X9020S2	68
826X9020S2	82
107X9020S2	100
35 VDCW	
472X9035A2	.0047
562X9035A2	.0056
682X9035A2	.0068
822X9035A2	.0082
103X9035A2	.01
123X9035A2	.012
153X9035A2	.015
183X9035A2	.018
223X9035A2	.022
273X9035A2	.027
333X9035A2	.033
393X9035A2	.039
473X9035A2	.047
563X9035A2	.056
683X9035A2	.068
823X9035A2	.082
104X9035A2	.10
154X9035A2	.15
184X9035A2	.18
224X9035A2	.22
274X9035A2	.27
334X9035A2	.33
394X9035A2	.39
474X9035A2	.47
564X9035A2	.56
684X9035A2	.68
824X9035A2	.82
105X9035A2	1.0
125X9035B2	1.2
155X9035B2	1.5
185X9035B2	1.8
225X9035B2	2.2
275X9035B2	2.7
335X9035B2	3.3
395X9035B2	3.9
475X9035B2	4.7
565X9035B2	5.6
685X9035B2	6.8
825X9035B2	8.2
106X9035R2	10
156X9035R2	15
186X9035R2	18
226X9035R2	22
276X9035S2	27
336X9035S2	33
396X9035S2	39
476X9035S2	47

PRICES FOR 150D TANTALEX (USE LAST 2 DIGITS)

Case Code	Case Dia. x Lgth.	Net 1-24	25-49	50-99	100-499	500-999
A2	.135" x .286"	$0.84	$0.64	$0.54	$0.44	$0.39
B2	.185" x .474"	.92	.70	.59	.48	.43
A2†	.135" x .286"	1.00	.76	.64	.52	.46
R2	.289" x .686"	1.84	1.39	1.17	.94	.82
S2	.351" x .786"	3.60	2.71	2.27	1.82	1.60

SPRAGUE CAPACITORS



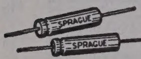
ATOM® TUBULAR
ELECTROLYTICS

For general service, replacement and construction of electronic equipment. Low leakage and long shelf life. Metal cases with outer plastic insulating sleeve.

Cat. No. 291-TVA-★	Cap. Mfd.	WV DC	Size Dia. x L.	Ea. 1-24	Ea. 25-49	50-99
1131	250	12	1-3/32 x 1-5/16	$0.87	$0.688	$0.602
1132	500	12	1-5/32 x 1-19/32	1.02	.804	.70
1161	250	15	1-3/32 x 1-5/16	.93	.74	.652
1162	500	15	1-5/32 x 1-19/32	1.05	.832	.73
1163	1000	15	13/16 x 1-13/16	1.38	1.088	.95
1203	5	25	9/32 x 19/32	.60	.458	.366
1204	10	25	9/32 x 3/4	.60	.468	.374
1205	25	25	11/32 x 3/4	.60	.461	.39
1206	50	25	11/32 x 7/8	.66	.52	.416
1207	100	25	13/32 x 1	.81	.635	.508
1208	250	25	15/32 x 1-5/16	1.02	.802	.698
1209	500	25	3/4 x 1-13/16	1.38	1.088	.95
1300	1	50	9/32 x 19/32	.54	.425	.346
1301	2	50	9/32 x 19/32	.54	.425	.346
1303	5	50	9/32 x 3/4	.60	.458	.366
1304	10	50	11/32 x 3/4	.60	.468	.374
1305.5	20	50	11/32 x 7/8	.60	.478	.382
1306	25	50	11/32 x 7/8	.63	.488	.39
1308	50	50	13/32 x 1	.72	.57	.456
1310	100	50	13/32 x 1-9/32	.84	.66	.528
1311	150	50	15/32 x 1-19/32	.93	.728	.582
1312	250	50	13/16 x 1-9/16	1.05	.833	.732
1313	500	50	1 x 1-15/16	1.44	1.131	.984
1402	4	150	11/32 x 7/8	.60	.47	.376
1405	8	150	13/32 x 7/8	.63	.493	.394
1406	10	150	13/32 x 1	.63	.481	.406
1410	20	150	13/32 x 1-19/32	.72	.555	.444
1412	30	150	15/32 x 1-19/32	.78	.61	.488
1413	40	150	13/16 x 1-9/16	.81	.643	.514
1414	50	150	13/16 x 1-13/16	.84	.663	.53
1418	80	150	15/16 x 1-9/16	.96	.76	.608
1420	100	150	15/16 x 2-1/16	1.05	.825	.66
1422	150	150	1-1/16 x 2-1/16	1.14	.903	.722
1423	200	150	1-1/16 x 2-9/16	1.32	1.024	.82
1501	4	250	13/32 x 1	.66	.515	.422
1503	8	250	13/32 x 1-19/32	.69	.544	.474
1505	12	250	13/32 x 2-1/16	.75	.586	.506
1508	20	250	13/16 x 1-5/16	.81	.644	.566

ATOM® TUBULARS CONT'D.

Cat. No. 291-TVA-★	Mfd. Cap.	WV DC	D. x L.	Ea. 1-24	Ea. 25-49	50 9
1511	40	250	13/16 x 2-1/16	$0.93	$0.739	$0.65
1601	4	350	13/32 x 1-5/16	.63	.495	.43
1604	10	350	3/4 x 1-9/16	.75	.595	.52
1608	20	350	13/16 x 1-13/16	.87	.687	.60
1611	40	350	15/16 x 2-1/16	1.05	.818	.70
1613	60	350	1-1/16 x 2-1/16	1.17	.925	.81
1701	2	450	13/32 x 1-5/16	.66	.525	.45
1702	4	450	15/32 x 1-9/16	.69	.544	.47
1704	8	450	3/4 x 1-9/16	.75	.598	.52
1705	10	450	13/16 x 1-9/16	.78	.61	.52
1706	12	450	13/16 x 1-9/16	.81	.646	.56
1708	16	450	13-16 x 1-13/16	.84	.664	.58
1709	20	450	15/16 x 1-13/16	.93	.735	.64
1711	30	450	15/16 x 2-1/16	1.02	.809	.71
1712	40	450	1-1/16 x 2-1/16	1.08	.848	.73
1714	60	450	1-1/16 x 2-13/16	1.41	1.119	.98
1716	80	450	1-1/16 x 3-13/16	1.95	1.513	1.29
1718	100	450	1-1/16 x 4-1/16	1.92	1.526	1.49
1804	20	475	15/16 x 2-5/16	.96	.753	.65
1906	20	500	1-1/16 x 2-5/16	.96	.828	.66
1963	10	600	1-1/16 x 3-3/16	2.19	1.696	1.45
1966	20	600	1-1/16 x 4-3/16	2.58	1.997	1.71
2428	20-20	150	13/16 x 1-9/16	1.05	.814	.69
2434	30-30	150	15/16 x 1-9/16	1.08	.856	.75
2442	40-30	150	15/16 x 1-13/16	1.08	.858	.75
2445	40-40	150	15/16 x 2-1/16	1.11	.884	.78
2450	50-30	150	15/16 x 2-1/16	1.17	.91	.78
2453	50-50	150	15/16 x 2-1/16	1.26	.963	.81
2460	80-30	150	15/16 x 2-5/16	1.32	1.045	.83
2462	80-50	150	15/16 x 2-9/16	1.41	1.085	.86
2730	20-20	450	15/16 x 2-13/16	1.50	1.179	1.02
2740	40-40	450	1-1/16 x 4-1/16	2.25	1.745	1.49
3444	30-30-30	150	15/16 x 2-5/16	1.86	1.438	1.23
3448	40-30-20	150	15/16 x 2-5/16	1.86	1.438	1.23
3451	40-40-40	150	1-1/16 x 2-9/16	1.92	1.60	1.28
3453	50-30-20	150	1-1/16 x 2-9/16	1.89	1.497	1.24
3455	80-40-20	150	1-1/16 x 3-1/16	1.98	1.537	1.32



TE LITTL-LYTICS®
TINY ELECTROLYTICS

For use in small electronic devices. In hermetically sealed metal cases with outer plastic insulating sleeve. Operating temp. to +85°C.

Cat. No. 291-TE-★	Mfd. Cap.	WV DC	Size (") Dia. x L.	Net 1-24	25-49	50-99
1058	50	3	.260 x .723	$0.57	$0.388	$0.31
1059.5	100	3	.322 x .723	.63	.438	.35
1064	200	3	.322 x .848	.81	.55	.44
1068	500	3	.385 x 1.286	.90	.625	.50
1080	1	6	.260 x .536	.57	.388	.31
1084	5	6	.260 x .536	.57	.388	.31
1087	10	6	.260 x .536	.57	.388	.31
1091	25	6	.260 x .536	.57	.388	.31
1102	100	6	.260 x .723	.81	.55	.44
1104	250	6	.322 x .848	.84	.575	.46
1127	5	12	.385 x .848	.57	.388	.31
1128	10	12	.260 x .536	.57	.388	.31
1131	25	12	.260 x .536	.57	.388	.31
1133	50	12	.260 x .723	.63	.438	.35
1135	100	12	.322 x .723	.84	.575	.46
1136	150	12	.322 x .848	.87	.60	.48
1138	250	12	.385 x .973	.90	.625	.50

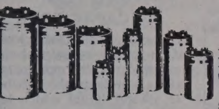
Continued in next column.

TE LITTL-LYTICS® CONT'D.

Cat. No. 291-TE-★	Mfd. Cap.	WV DC	Size (") Dia. x L.	Net 1-24	25-49	50 9
1200	1	25	.385 x 1.286	$0.57	$0.388	$0.3
1202	5	25	.260 x .536	.57	.388	.3
1204	10	25	.260 x .536	.57	.388	.3
1205	15	25	.260 x .723	.57	.388	.3
1207	25	25	.260 x .723	.63	.438	.35
1208	35	25	.322 x .723	.63	.438	.35
1209	50	25	.322 x .723	.81	.55	.44
1210	75	25	.385 x .848	.84	.575	.46
1211	100	25	.385 x .973	.87	.60	.48
1300	1	50	.260 x .536	.57	.388	.31
1301	2	50	.260 x .536	.57	.388	.31
1302.1	4	50	.260 x .536	.57	.388	.31
1303	5	50	.260 x .723	.57	.388	.31
1304	10	50	.322 x .723	.63	.438	.35
1304.2	15	50	.322 x .723	.63	.438	.35
1305	20	50	.322 x .848	.81	.55	.44
1306	35	50	.385 x .848	.84	.575	.46
1307	50	50	.385 x .973	.87	.60	.48
1407	10	100	.385 x .848	.84	.575	.46
1408	15	100	.385 x .973	.87	.60	.48
1409	20	100	.385 x 1.286	.90	.625	.50
1503	4	150	.322 x .848	.81	.55	.44
1507	10	150	.385 x .973	.87	.60	.48

★Be sure to include the entire Cat. No., i.e., 291-TVA-1131

MALLORY CAPACITORS



CG & CGS COMPUTER GRADE CAPACITORS

Aluminum electrolytic capacitors with pressure-sensitive safety vent. Operating life should exceed 10 years when used within stated parameters. Derating voltage and/or lowering operating temperature will extend life by a large factor. Temperature Range: (CGS) -20°C to +65°C, +85°C (CG). Tolerance: 0-150WVDC, -10 +75% (U); 151 WVDC up, -10 +50% (T). Both types supplied with polyester film insulating sleeves and have "High-post" terminals with #10-32 screws. Physical mounting of these capaci-
ors is usually done with VR clamps shown below. The clamps are not included with the capacitor. Order separately. ★Include complete
atalog number i.e., 47-CG322U10A1.

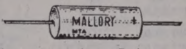
Cat. 47-★	Cap. uF	WV DC	Case Size	Net Ea.
CG322U10A1	3,200	10	A	$1.89
CG63U10B1	6,000	10	B	2.55
CG822U10C1	8,200	10	C	3.06
CG14U10H1	10,000	10	H	3.40
CG1352U10K1	13,500	10	K	4.01
CG143U10J1	14,000	10	J	4.16
CG183U10D1	18,000	10	D	4.95
CG34U10E1	30,000	10	E	7.13
CG4352U10F1	43,500	10	F	8.91
CG683U10G1	68,000	10	G	10.43
CGS104U010FF1	100,000	10	F	11.14
CGS134U010FH1	130,000	10	I	13.06
CGS164U010FJ1	160,000	10	L	14.96
CG252U15A1	2,500	15	A	2.12
CG452U15B1	4,500	15	B	2.80
CG642U15C1	6,400	15	C	2.90
CG83U15H1	8,000	15	H	3.31
CG1052U15K1	10,500	15	K	3.65
CG113U15J1	11,000	15	J	3.78
CG143U15D1	14,000	15	D	4.82
CG343U15F1	34,000	15	F	7.67
CG533U15G1	53,000	15	G	10.04
CGS803U015FF1	80,000	15	F	10.69
CGS104U015FH1	100,000	15	I	13.18
CGS124U015FJ1	120,000	15	L	15.28
CG152U25A1	1,500	25	A	1.85
CG282U25B1	2,800	25	B	2.28
CG382U25C1	3,800	25	C	2.80
CG452U25H1	4,500	25	H	2.99
CG63U25K1	6,000	25	K	3.48
CG852U25D1	8,500	25	D	4.21
CG1352U25E1	13,500	25	E	6.46
CG24U25F1	20,000	25	F	7.07
CG3152U25G1	31,500	25	G	9.48
CGS433U025FF1	43,000	25	F	10.10
CGS573U025FH1	57,000	25	I	13.08
CGS673U025FJ1	67,000	25	L	14.54
CG112U35A1	1,100	35	A	2.04
CG212U35B1	2,100	35	B	2.33
CG312U35C1	3,100	35	C	3.28
CG362U35H1	3,600	35	H	3.46
CG472U35K1	4,700	35	K	3.73
CG532U35J1	5,300	35	J	3.92
CG692U35D1	6,900	35	D	5.15
CG113U35E1	11,000	35	E	6.93
CG1652U35F1	16,500	35	F	7.73
CG243U35G1	24,000	35	G	8.37
CG82U50A1 •	800	50	A	1.87
CG152U50B1	1,500	50	B	2.21
CG23U50C1	2,000	50	C	2.47
CG252U50H1	2,500	50	H	2.72
CG332U50K1	3,300	50	K	3.51
CG352U50J1	3,500	50	J	3.55
CG452U50D1	4,500	50	D	3.74
CG732U50E1	7,300	50	E	5.75
CG14U50F1	10,000	50	F	7.23
CG1652U50G1	16,500	50	G	9.93
CGS223U050FF1	22,000	50	F	10.88
CGS303U050FH1	30,000	50	I	13.80
CGS353U050FJ1	35,000	50	L	15.58
CG62U75A1	600	75	A	2.17
CG13U75B1	1,000	75	B	2.53
CG152U75C1	1,500	75	C	3.06
CG23U75H1	2,000	75	H	3.33
CG252U75K1	2,500	75	K	3.99
CG262U75J1	2,600	75	J	4.05
CG3451U75D1	3,450	75	D	4.35
CG552U75E1	5,500	75	E	6.91
CG822U75F1	8,200	75	F	7.83
CG1252U75G1	12,500	75	G	10.20
CGS193U075FJ1	19,000	75	L	13.88

Cat. 47-★	Cap. uF	WV DC	Case Size	Net Ea.
CG42U100A1	400	100	A	$2.17
CG751U100B1	750	100	B	2.57
CG13U100C1	1,000	100	C	2.94
CG132U100H1	1,300	100	H	3.22
CG172U100J1	1,700	100	J	3.57
CG2251U100D1	2,250	100	D	4.44
CG362U100E1	3,600	100	E	6.51
CG532U100F1	5,300	100	F	7.27
CG832U100G1	8,300	100	G	10.45
CGS932U100FF1	9,300	100	F	13.42
CGS123U100FH1	12,000	100	I	16.48
CGS153U100FJ1	15,000	100	L	20.18
CG2750U150A1	275	150	A	1.76
CG52U150B1	500	150	B	2.21
CG72U150C1	700	150	C	2.59
CG8750U150H1	875	150	H	2.92
CG112U150K1	1,100	150	K	3.38
CG1151U150J1	1,150	150	J	3.42
CG1551U150D1	1,550	150	D	4.33
CG252U150E1	2,500	150	E	6.39
CG362U150F1	3,600	150	F	7.64
CG562U150G1	5,600	150	G	10.65
CGS742U150FH1	7,400	150	I	14.74
CGS872U150FJ1	8,700	150	L	16.88
CG181T200A1	180	200	A	2.18
CG341T200B1	340	200	B	2.61
CG451T200C1	450	200	C	2.78
CG551T200H1	550	200	H	3.08
CG751T200K1	750	200	K	3.56
CG82T200J1	800	200	J	3.71
CG13T200D1	1,000	200	D	4.87
CG1651T200E1	1,650	200	E	5.78
CG2451T200F1	2,450	200	F	7.37
CG382T200G1	3,800	200	G	13.24
CG141T250A1	140	250	A	2.60
CG2750T250B1	275	250	B	2.97
CG3750T250C1	375	250	C	3.22
CG451T250H1	450	250	H	3.49
CG62T250K1	600	250	K	3.94
CG82T250D1	800	250	D	5.09
CG132T250E1	1,300	250	E	6.80
CG192T250F1	1,900	250	F	8.20
CG33T250G1	3,000	250	G	10.97
CGS392T250FH1	3,900	250	I	13.58
CG12T350A1	100	350	A	2.62
CG251T350C1	250	350	C	3.19
CG42T350K1	400	350	K	3.85
CG551T350D1	550	350	D	5.50
CG132T350F1	1,300	350	F	9.27
CG23T350G1	2,000	350	G	11.48
CG41T450A1	40	450	A	1.94
CG111T450C1	110	450	C	2.94
CG241T450D1	240	450	D	3.69
CGS112T450FF1	1,100	450	F	13.96
CGS182T450FJ1	1,800	450	L	18.94

CG/CGS CASE SIZES

Code	Dia. x L.	Mtg. Clamp	Net
A	1-25/64x2-9/64"	47-VR3	$.12
B	1-25/64x3-9/64"	47-VR3	.12
C	1-25/64x4-9/64"	47-VR3	.12
H	1-49/64x3-9/64"	47-VR6	.14
J	1-49/64x4-9/64"	47-VR6	.14
K	2-1/64x3-9/64"	47-VR8	.14
D	2-1/64x4-9/64"	47-VR8	.14
E	2-33/64x4-9/64"	47-VR10	.20
F	3-1/64x4-9/64"	47-VR12	.30
I	3-1/64x5-9/64"	47-VR12	.30
G	3-1/64x5-41/64"	47-VR12	.30
L	3-1/64x5-57/64"	47-VR12	.30

MTA MOLDED ALUMINUM ELECTROLYTICS



All-welded construction. Polypropylene case material provides extreme humidity protection; excludes water molecules while allowing for molecular venting. Temp. Range: -20°C. to +65°C. Tolerance: -10%, +100%. Size: *5/16x¾; †3/8x1;‡½x1-3/8".
NOTE: Also available in verticle mounting. Call for information and prices.

Cat. No.	µf	WVDC	Net
47-MTA60D3*	60	3	$0.35
47-MTA175E3†	175	3	.44
47-MTA600F3‡	600	3	.44
47-MTA50D6*	50	6	.35
47-MTA125E6†	125	6	.38
47-MTA150E6†	150	6	.38
47-MTA450F6‡	450	6	.49
47-MTA500F6‡	500	6	.49
47-MTA40D10*	40	10	.35
47-MTA75E10†	75	10	.38
47-MTA100E10†	100	10	.38
47-MTA200F10‡	200	10	.44
47-MTA400F10‡	400	10	.52
47-MTA30D15*	30	15	.35
47-MTA35D15*	35	15	.25
47-MTA50E15†	50	15	.38
47-MTA80E15†	80	15	.38
47-MTA90E15†	90	15	.38
47-MTA100E15†	100	15	.38
47-MTA250F15‡	250	15	.49
47-MTA300F15‡	300	15	.55
47-MTA25D20*	25	20	.35
47-MTA60E20†	60	20	.38
47-MTA70E20†	70	20	.38
47-MTA250F20‡	250	20	.55
47-MTA50E25†	50	25	.38
47-MTA175F25‡	175	25	.52
47-MTA200F25‡	200	25	.55
47-MTA20D30*	20	30	.35
47-MTA40E30†	40	30	.38
47-MTA9D35*	9	35	.35
47-MTA10D35*	10	35	.35
47-MTA15D35*	15	35	.35
47-MTA25E35†	25	35	.38
47-MTA30E35†	30	35	.38
47-MTA35E35†	35	35	.38
47-MTA90F35‡	90	35	.49
47-MTA100F35‡	100	35	.49
47-MTA125F35‡	125	35	.52
47-MTA150F35‡	150	35	.55
47-MTA1D50*	1	50	.35
47-MTA2D50*	2	50	.35
47-MTA3D50*	3	50	.35
47-MTA4D50*	4	50	.35
47-MTA5D50*	5	50	.35
47-MTA6D50*	6	50	.35
47-MTA7D50*	7	50	.35
47-MTA8D50*	8	50	.35
47-MTA9E50†	9	50	.35
47-MTA10E50†	10	50	.35
47-MTA15E50†	15	50	.35
47-MTA20E50†	20	50	.38
47-MTA25F50‡	25	50	.44
47-MTA30F50‡	30	50	.44
47-MTA35F50‡	35	50	.44
47-MTA40F50‡	40	50	.44
47-MTA50F50‡	50	50	.44
47-MTA60F50‡	60	50	.49
47-MTA70F50‡	70	50	.49
47-MTA80F50‡	80	50	.52

MALLORY CAPACITORS

"FP & WP" DRY ELECTROLYTICS

Dry electrolytics for use in radio, lab, TV and service work. For use up to 85°C. All types use "etched cathode" construction for hum-free operation, and have an exclusive vent and seal design. May be adapted to printed circuit mounting by using an FPA adapter Kit. Types shown below have standard twist-mounting lugs with solder terminals. Only the most popular types are listed below.

Cat. No.	Cap uF	V-DC Working	Size Dia. x Lgth.	Net 1-24	25-49	50-99
47-WP042A	3000	15	1-3/8"x2"	$2.93	$1.735	$1.387
47-WP059	1000	25	1-3/8"x2"	2.18	1.292	1.032
47-WP068A	1500	50	1-3/8"x3"	2.97	2.001	1.600
47-FP119A	300	150	1-3/8"x2"	1.96	1.320	1.055
47-FP146	40	450	1"x2½"	1.52	1.022	.817
47-FP155A	125	450	1-3/8"x3"	2.75	1.851	1.480
47-FP231A	10-10	450-450	1"x1-3/4"	1.34	.902	.721
47-FP234A	20-20	450-450	1"x2½"	1.77	1.045	.835
47-FP238A	40-40	450-450	1-3/8"x2½"	2.37	1.595	1.275
47-FP375.8	10-10-10	450-450-450	1"x2½"	1.80	1.065	.851
47-FP377.1A	40-40-40	450-450-450	1-3/8"x3"	3.38	2.002	1.600
47-FP444A	20-20-20-20	450-450-450-450	1-3/8"x2½"	3.20	1.734	1.387

HC,NP

HB

PL

HIGH CAPACITY DRY ELECTROLYTICS

HC and NP capacitors are furnished in heavy-duty molded phenolic cases with integral safety vent. HC types are polarized; NP types are non-polarized. Temp. Range: -20C to +85°C. Tolerance: (HC) 0-50 WVDC, -10%, +150%; 51-350 WVDC -10%, +100%; 351 WVDC up, -10%, +50%. Type NP ±25%, all units. *Semipolarized.

Cat. No.	Cap. uF	WV DC	Dia. x L.	Net Ea.
47-HC-1540A	4000	15	AxI	$5.37
47-HC-2050-50	2x5000	20	DxI	8.00
47-HC-2530	3000	25	CxG	4.88
47-HC-2540A	4000	25	CxG	5.58
47-HC-2550	5000	25	DxI	6.30
47-HC-4040A	4000	40	CxI	6.98
47-HC-5005A	500	50	AxE	3.33
47-HC-5010A	1000	50	AxG	4.25
47-HC-5020A	2000	50	CxG	5.06
47-HC-5030	3000	50	DxI	7.00
47-HC-5040	4000	50	DxI	7.32
47-HC-15010A	1000	150	CxI	6.44
47-HC-45003	300	450	DxI	8.47

NON-POLARIZED TYPE NP

Cat. No.	Cap. uF	WV DC	Dia. x L.	Net Ea.
47-NP-1255A	500	125	CxI	$4.04
47-NP-3008	50	300	AxG	5.25
47-NP-3014A	100	300	CxG	6.13
47-NP-3025	200	300	DxI	7.00
47-NP-4505	50	450	CxG	6.30

HC-NP HARDWARE

Cat. No.	Description	Net Ea.
47-PL-3	1-7/16" cap†	$0.16
47-PL-6	1-13/16" cap†	.19
47-PL-8	2-1/16" cap†	.22
47-PL-10	2-9/16" cap†	.25
47-PLA-3	1-7/16" cap‡‡	.16
47-PLA-6	1-13/16" cap‡‡	.19
47-PLA-8	2-1/16" cap‡‡	.22
47-PLA-10	2-9/16" cap‡‡	.25
47-HB-2	3-1/64" bracket	.22
47-HB-4	3-21/32" bracket	.22
47-HB-8	4-21/32" bracket	.25

Plastic end caps: †use on motor. ‡Use off motor. Brackets for plastic cases.

Case Sizes

A 1-7/16"
B 1-1/2"
C 1-13/16"
D 2-1/16"
E 2-3/4"
F 3"
G 3-3/8"
H 4-1/8"
I 4-3/8"
....

AC MOTOR START CAPACITORS

Dry electrolytic, non-polarized capacitors for intermittent duty in motor starting circuits. Similar in appearance to HC/NP above. Molded plastic cases are oil and moisture resistant. Popular sizes are listed below. Others are available.

Cat. No.	Cap. Mfd.	AC V.	Dia. x L.	Net Ea.
47-PSU7215	72-88	115	AxE	$1.09
47-PSU8815	88-108	115	AxE	1.15
47-PSU10815	108-130	115	AxE	1.17
47-PSU12415	124-149	115	AxE	1.18
47-PSU13015	130-156	115	AxE	1.25
47-PSU14515	145-175	115	AxE	1.29
47-PSU16115	161-193	115	AxE	1.32
47-PSU18915	189-227	115	AxF	1.53
47-PSU20015	200-240	115	AxF	1.57
47-PSU21615	216-259	115	AxF	1.63
47-PSU23315	233-280	115	AxG	1.89
47-PSU24315	243-292	115	BxF	1.92
47-PSU27015	270-324	115	BxF	1.93
47-PSU30015	300-360	115	BxF	2.14
47-PSU32415	324-388	115	BxF	2.20
47-PSU34015	340-408	115	BxF	2.24
47-PSU37815	378-440	115	BxF	2.34
47-PSU40015	400-480	115	BxF	2.47
47-PSU43015	430-516	115	CxG	2.90
47-PSU46015	460-552	115	CxG	3.05
47-PSU14120R	141-169	220	CxG	4.12
47-PSU14520	145-174	220	CxG	4.11
47-PSU21620	216-259	220	DxG	5.41
47-PSU23320	233-280	220	DxG	5.81

DIMENSIONS

A 1-7/16"
B 1-13/16"
C 2-1/16"
D 2-9/16"
E 2-3/4"
F 3-3/8"
G 4-3/8"
....
....

NON-POLAR SINGLE SEC. ELECTROLYTIC

Metal tubulars with insulating sleeve. Temperature range: -20°C–+85°C. Tolerance -10%, +100%.

Cat. 47-★	Cap. uF.	VNP	Size, In. Dia. x Lg.	Net Ea.
TCN105	5	10	11/16 x 1¼	$0.68
TCN108	8	10	9/16 x 1¼	.68
TCN1025	25	10	3/8 x 13/16	.75
TCN412	500	10	15/16 x 2	1.20
TCN501	1	50	9/16 x 1¼	.68
TCN503	3	50	9/16 x 1¼	.68
TCN505	5	50	9/16 x 1¼	.70
TCN5010	10	50	9/16 x 1¼	.72
TCN5099	100	50	15/16 x 1¾	1.42
TCN510	4	150	9/16 x 1¼	.70
TCN1512	12	150	5/8 x 1¾	.97
TCN1551	50	150	15/16 x 2¼	1.19

★Include entire Cat. No. i.e. 47-TCN105

SPRAGUE

TYPE "OV"
A-C CAPACITORS

Oval case capacitors which ca
often replace cylindrical an
rectangular units. Impregnate
with a non-flammable synth
tic askarel liquid which ha
high dielectric strength. Qui
connect terminals with insul
ting cups. Mechanically ru
ged, will withstand severe motor vibratio
Internally fused units identified by (T) su
fix. Outside foil terminal identified by re
dot.

330/370 V-AC, 60 Hz.

Cat. No.	Cap. Mfd.	Size WxTxH	Ne E
291-OV-3020	2	GxAxB	$3.2
291-OV-3030	3	GxAxF	3.3
291-OV-3040	4	GxAxH	3.8
291-OV-3050	5	GxExK	5.1
291-OV-3060	6	GxExP	5.8
291-OV-3070	7	OxHxI	6.9
291-OV-3080	8	OxHxL	7.6
291-OV-3090	9	OxHxL	8.4
291-OV-3100	10	OxHxN	8.2
291-OV-3110	11	OxHxR	9.4
291-OV-3120	12	OxHxR	9.7
291-OV-3150	15	OxHxS	8.8
291-OV-3200	20	OxHxY	13.0
291-OV-3250	25	OxHxA1	15.9
291-OV-3300	30	OxHxA4	17.6
291-OV-3300T	30	TxDxA2	18.2
291-OV-3350	35	TxDxA4	18.4
291-OV-3350T	35	TxDxA5	19.0
291-OV-3400T	40	TxDxA8	19.6

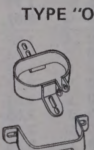
440 V-AC, 60 Hz.

Cat. No.	Cap. Mfd.	Size WxTxH	Ne E
291-OV-4020	2	GxAxF	$4.2
291-OV-4030	3	GxAxJ	4.5
291-OV-4040	4	GxAxQ	6.1
291-OV-4050	5	GxAxU	6.0
291-OV-4060	6	OxHxL	7.2
291-OV-4080	8	OxHxR	8.4
291-OV-4100	10	MxCxS	8.6
291-OV-4100T	10	MxCxV	9.2
291-OV-4110	11	OxHxW	9.7
291-OV-4125	12.5	OxHxX	10.2
291-OV-4150	15	MxCxZ	12.0
291-OV-4200	20	OxHxA3	14.6
291-OV-4250	25	TxDxA5	18.6
291-OV-4300	30	TxDxA7	23.6
291-OV-4300T	30	TxDxA5	24.4
291-OV-4350	35	TxDxA6	27.0
291-OV-4400	40	TxDxA9	29.7

660 V-AC, 60 Hz.

Cat. No.	Cap. Mfd.	Size WxTxH	Ne E
291-OV-6010	1	GxAxF	$3.8
291-OV-6020	2	GxAxN	5.4
291-OV-6040	4	OxHxR	7.9
291-OV-6060	6	OxHxW	10.3
291-OV-6080	8	OxHxA2	13.2

TYPE "OV" MTG. HARDWARE



Cat. No.	Cap. Thickness	N E
291-OPC-1*	A	$1.8
291-OPC-2*	H	1.8
291-OVC-1	GxAx-	.2
291-OVC-2	OxHx-	.2
291-OVC-3	MxCx-	.2
291-OVC-4	TxDx-	.2

*Wrap around clamp.

CASE SIZES IN INCHES

A. 1-5/16
B. 1-5/8
C. 1-29/32
D. 1-31/32
E. 1-15/16
F. 2
G. 2-5/32
H. 2-1/4
I. 2-9/32
J. 2-1/2
K. 2-5/8
L. 2-25/32
M. 2-29/32
N. 2-7/8
O. 2-15/16
P. 3
Q. 3-1/4
R. 3-3/8
S. 3-5/8
T. 3-21/32
U. 3-3/4
V. 3-7/8
W. 4-5/32
X. 4-21/32
Y. 5
Z. 5-1
A1. 6
A2. 6-1
A3. 6-5
A4. 7-1
A5. 7-1
A6. 8-1
A7. 8-3
A8. 8-3
A9. 9-1
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CRL® CERAMIC CAPACITORS

DD DISC CERAMIC CAPACITORS

deal for use as by-pass coupling in high frequency circuits. 000 VDC working except DD6-103, DD-153, DD-203, DD-303, D-403, DD-503, which are 600 VDC working. Tolerance all ± 10% xcept * ± 20%, + ± .5MMF, # GMV, ** +80-20%.

1000 VDCW			1000 VDCW		
at.	pFd.	Dia.	Cat.	pFd.	Dia.
65-DD-3R3	3.3+	.290"	165-DD-391	390	.290"
65-DD-050	5	.290"	165-DD-401	400	.290"
65-DD-060	6	.290"	165-DD-471	470	.290"
65-DD-6R8	6.8	.290"	165-DD-501	500	.290"
65-DD-7R5	7.5	.290"	165-DD-511	510	.290"
65-DD-080	8	.290"	165-DD-561	560	.290"
65-DD-100	10	.290"	165-DD-601	600	.290"
65-DD-120	12	.290"	165-DD-681	680	.290"
65-DD-150	15	.290"	165-DD-751	750	.290"
65-DD-180	18	.290"	165-DD-801	800#	.290"
65-DD-200	20	.290"	165-DD-821	820	.290"
65-DD-220	22	.290"	165-DD-911	910	.290"
65-DD-240	24	.290"	165-DD-102	1000	.385"
65-DD-250	25	.290"	165-DD-102G	1000#	.290"
65-DD-270	27	.290"	165-DD-122	1200	.385"
65-DD-300	30	.290"	165-DD-132	1300	.385"
65-DD-330	33	.290"	165-DD-152	1500	.385"
65-DD-390	39	.290"	165-DD-152G	1500#	.290"
65-DD-470	47	.290"	165-DD-162	1600	.385"
65-DD-500	50	.290"	165-DD-182	1800	.385"
65-DD-560	56	.290"	165-DD-202	2000#	.385"
65-DD-680	68	.290"	165-DD-222	2200#	.385"
65-DD-750	75	.290"	165-DD-252	2500#	.385"
65-DD-820	82	.290"	165-DD-272	2700#	.385"
65-DD-910	91	.290"	165-DD-302	3000#	.385"
65-DD-101	100	.290"	165-DD-332	3300#	.590"
65-DD-121	120	.290"	165-DD-392	3900#	.590"
65-DD-131	130	.290"	165-DD-402	4000#	.590"
65-DD-151	150	.290"	165-DD-432	4300#	.590"
65-DD-181	180	.290"	165-DD-472	4700*	.590"
65-DD-201	200	.290"	165-DD-472G	4700#	.590"
65-DD-241	240	.290"	165-DD-5022	5K*	.590"
65-DD-251	250	.290"	165-DD-502	5000#	.590"
65-DD-271	270	.290"	165-DD-562	5600#	.590"
65-DD-301	300	.290"	165-DD-682	6800#	.590"
65-DD-331	330	.290"	165-DD-752	7500#	.590"
65-DD-351	350	.290"	165-DD-822	8200#	.690"
65-DD-361	360	.290"			

bove listed capacitors, each .... Net $.15

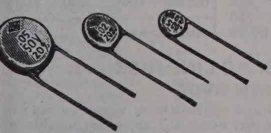
65-DD-103	10K#	.590"	1000 VDCW	Net $.24
65-DD6-103	10K#	.690"	600 VDCW	Net $.24
65-DD-153	15K**	.690"	600 VDCW	Net $.24
65-DD-203	20K**	.690"	600 VDCW	Net $.45
65-DD-303	30K**	.718"	600 VDCW	Net $.45
65-DD-403	40K**	.718"	600 VDCW	Net $.45
65-DD-503	50K**	.875"	600 VDCW	Net $.45

DD16 DISC BUFFERS

1600 V-DC WRKG.

eramic disc capacitors which are small in ize and easy to install. Leads are #22 inned wire.

at.	Mfd.	Dia.	Thick	Tol.	Net
65-DD16-302	.003	.605"	11/64"	GMV	$.27
65-DD16-402	.004	.605"	11/64"	GMV	.27
65-DD16-502	.005	.605"	11/64"	GMV	.27
65-DD16-602	.006	.705"	11/64"	GMV	.27
65-DD16-702	.007	.705"	11/64"	GMV	.27
65-DD16-752	.0075	.835"	11/64"	GMV	.27
65-DD16-802	.008	.835"	11/64"	GMV	.27
65-DD16-103	.01	.835"	11/64"	GMV	.27
65-DD16-153	.015	.935"	11/64"	-20 +80%	.48

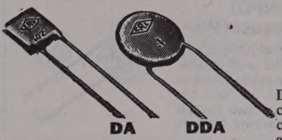


TYPE "CK"

LOW VOLTAGE DISCS

For low voltage, high capacity in transistor circuits. +80-20%Tol.50 V-DC Working voltage.

at.	Cap.	Dia.	Thickness	Net
65-CK-502	.005 Mfd.	.390"	.156"	$.21
65-CK-103	.01 Mfd.	.390"	.156"	.21
65-CK-203	.02 Mfd.	.590"	.156"	.21
65-CK-253	.025 Mfd.	.590"	.156"	.21
65-CK-303	.03 Mfd.	.590"	.156"	.21
65-CK-503	.05 Mfd.	.690"	.156"	.30
65-CK-104	.1 Mfd.	.719"	.171"	.60



DA & DDA TRANSISTOR CIRCUIT CAPACITORS

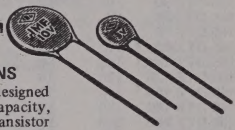
Designed to meet the increasing demand for high capacity low, voltage ceramic capacitors for use in transistor circuits. Double durez resin insulated. #22 gauge tinned leads. *Diameter, Type DA 30 UDC working, 50 UDC Test.

Cat.	Mfd.	Sq.	Thick	Tol.	Net
165-DA-203	.02	½"	.140"	-20% +100%	$ .36
165-DA-503	.05	9/16"	.160"	-20% +100%	.81
165-DA-104	.1	9/16"	.218"	-20% +100%	1.35

75 V-DC WRKG.——150 V-DC TEST

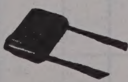
165-DDA-503	.05	.690"*	5/32"	-30% + 80%	$.30
165-DDA-104	.1	.719"*	5/32"	-30% + 80%	.60

LOW VOLTAGE TYPE "UK" DISC ULTRA-KAP™ FOR TRANSISTOR CIRCUIT APPLICATIONS



Miniature ceramic capacitors designed to meet the demands for high capacity, low voltage applications in transistor circuits. Double durez insulation with high vacuum wax impregnation to withstand extreme temperature, humidity and vibration. Capacitors are stamped with capacity and voltage. Thickness: .156".

Cat.	WVDC	MFd.	Tol.	Dia.	Net
165-UK-104	3	.1	GMV	.220"	$0.42
165-UK-224	3	.22	GMV	.290"	.30
165-UK-474	3	.47	GMV	.405"	.30
165-UK-105	3	1.0	GMV	.590"	.36
165-UK-225	3	2.2	GMV	.820"	.42
165-UK10-503	10	.05	+80, -20%	.290"	.18
165-UK10-104	10	.1	+80, -20%	.405"	.18
165-UK10-204	10	.2	+80, -20%	.590"	.30
165-UK10-474	10	.47	+80, -20%	.820"	.42
165-UK16-103	16	.01	+80, -20%	.290"	.15
165-UK16-223	16	.022	+80, -20%	.390"	.16
165-UK16-333	16	.033	+80, -20%	.390"	.23
165-UK16-503	16	.05	+80, -20%	.406"	.23
165-UK16-683	16	.068	+80, -20%	.515"	.24
165-UK16-104	16	.1	+80, -20%	.590"	.19
165-UK16-154	16	.15	+80, -20%	.690"	.35
165-UK16-204	16	.2	+80, -20%	.820"	.53
165-UK16-304	16	.3	+80, -20%	.920"	.63
165-UK20-503	20	.05	+80, -20%	.405"	.18
165-UK20-104	20	.1	+80, -20%	.590"	.21
165-UK20-204	20	.2	+80, -20%	.820"	.39
165-UK25-103	25	.01	± 20%	.290"	.16
165-UK25-223	25	.022	± 20%	.390"	.19
165-UK25-333	25	.033	± 20%	.405"	.24
165-UK25-503	25	.05	± 20%	.485"	.24
165-UK25-683	25	.068	± 20%	.590"	.25
165-UK25-104	25	.1	± 20%	.690"	.25
165-UK25-154	25	.15	± 20%	.820"	.55
165-UK25-204	25	.2	± 20%	.920"	.73
165-UK50-103	50	.01	± 20%	.290"	.19
165-UK50-153	50	.015	± 20%	.390"	.25
165-UK50-223	50	.022	± 20%	.485"	.35
165-UK50-333	50	.033	± 20%	.515"	.38
165-UK50-473	50	.047	± 20%	.590"	.46
165-UK50-503	50	.05	± 20%	.690"	.51
165-UK50-683	50	.068	± 20%	.760"	.68
165-UK50-104	50	.1	± 20%	.920"	.86



DF FLAT PLATE

600 V-DC WRKG.

High capacity, low mass weight, unusual thin design and inherent ceramic stability and performance have made these units popular for use as bypass or filter capacitors. Insulated with durez resin coating. Stamped with capacity.

Cat.	Mfd.	Size	Tol.	Net
165-DF-503	.05	1-7/16 x 1-1/16 x 7/32"	GMV	$.75
165-DF-104	.1	1-7/16 x 1-1/16 x 19/64"	-20% +80%	1.05

CRL® CERAMIC CAPACITORS

DTZ DISCS (NPO)

TEMPERATURE COMPENSATING

Because of the inherent stability of T.C. ceramic dielectric material and smaller size, DTZ types find many applications in frequency determining and resonant circuits and are better than mica for all applications. 600 vdc working voltage, 1500 vdc test.

Cat. No.	Cap. pF.	Tol ±	Size Dia. x Thickness	Net Ea.
165-DTZ-1R5	1.5	.5pF	.320" x .180"	**$0.18**
165-DTZ-2R2	2.2	.5pF	.290" x .156"	**.18**
165-DTZ-3R3	3.3	.5pF	.290" x .156"	**.18**
165-DTZ-4R7	4.7	.5pF	.290" x .156"	**.18**
165-DTZ-6R8	6.8	.5pF	.290" x .156"	**.18**
165-DTZ-10	10	5%	.290" x .156"	**.18**
165-DTZ-15	15	5%	.290" x .156"	**.18**
165-DTZ-20	20	5%	.290" x .156"	**.18**
165-DTZ-22	22	5%	.390" x .156"	**.18**
165-DTZ-25	25	5%	.390" x .156"	**.18**
165-DTZ-33	33	5%	.390" x .156"	**.18**
165-DTZ-47	47	5%	.590" x .156"	**.18**
165-DTZ-50	50	5%	.590" x .156"	**.18**
165-DTZ-68	68	5%	.590" x .156"	**.18**
165-DTZ-75	75	5%	.590" x .156"	**.18**
165-DTZ-82	82	5%	.590" x .156"	**.18**
165-DTZ-100	100	5%	.590" x .156"	**.18**
165-DTZ-120	120	5%	.690" x .156"	**.18**
165-DTZ-150	150	5%	.760" x .156"	**.18**
165-DTZ-180	180	5%	.594" x .235"	**.30**
165-DTZ-200	200	5%	.594" x .235"	**.30**
165-DTZ-220	220	5%	.719" x .250"	**.30**
165-DTZ-270	270	5%	.719" x .250"	**.30**

DTN DISCS (N750)

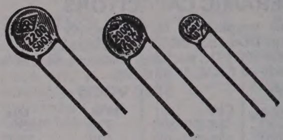
Cat. No.	Cap. pF.	Tol ±	Size Dia. x Thickness	Net Ea.
165-DTN-5	5	.5pF	.320" x .180"	**$0.18**
165-DTN-10	10	.5pF	.290" x .156"	
165-DTN-15	15	5%	.290" x .156"	
165-DTN-20	20	5%	.290" x .156"	
165-DTN-22	22	5%	.290" x .156"	
165-DTN-25	25	5%	.290" x .156"	
165-DTN-33	33	5%	.290" x .156"	
165-DTN-47	47	5%	.290" x .156"	
165-DTN-68	68	5%	.390" x .156"	
165-DTN-75	75	5%	.390" x .156"	
165-DTN-100	100	5%	.390" x .156"	
165-DTN-150	150	5%	.590" x .156"	
165-DTN-200	200	5%	.590" x .156"	
165-DTN-220	220	5%	.590" x .156"	
165-DTN-330	330	5%	.690" x .156"	

DD30 DISCS

3000 VDCW

Tested at twice the working voltage and exceed EIA-RS-165 life test. Highly efficient for by-pass coupling in high frequency circuits under conditions of extreme humidity or temperature. All units ±20% tolerance. Operating temperature range -55 to +85°C. *Pkg. of 50.

Cat. No.	Cap.	Size Dia. x Thickness	Net 1-49	50-100*
165-DD30-4R7	4.7pF	.330" x .203"	**$0.24**	**$0.19**
165-DD30-100	10pF	.330" x .203"		
165-DD30-220	22pF	.330" x .203"		
165-DD30-330	33pF	.330" x .203"		
165-DD30-470	47pF	.330" x .203"		
165-DD30-680	68pF	.330" x .203"		
165-DD30-820	82pF	.330" x .203"		
165-DD30-101	100pF	.330" x .203"		
165-DD30-121	120pF	.330" x .203"		
165-DD30-181	180pF	.330" x .203"		
165-DD30-221	220pF	.330" x .203"		
165-DD30-271	270pF	.330" x .203"		
165-DD30-331	330pF	.330" x .203"		
165-DD30-471	470pF	.330" x .203"		
165-DD30-681	680pF	.330" x .203"		
165-DD30-821	820pF	.430" x .203"		
165-DD30-102	.001uF	.430" x .203"	**$0.30**	**$0.238**
165-DD30-122	.0012uF	.430" x .203"		
165-DD30-222	.0022uF	.630" x .203"		
165-DD30-272	.0027uF	.630" x .203"		
165-DD30-332	.0033uF	.630" x .203"		
165-DD30-472	.0047uF	.730" x .203"		
165-DD30-502	.005uF	.800" x .203"		



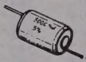
CE & CF

DISC CAPACITORS

Type CE & CF disc capacitors offer extra high stability through extended temperature ranges. Minimum variation between temps of -55°C and +85°C Leads are 1½". of No 22 tinned wire. Tolerance. ±10%. Working voltage 500 v-dc. Thickness .156". .Av. wt. 1 oz. Dia.: A .290"; B .390"; C .590"; D .690"

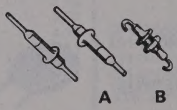
Cat.	pFd.	Dia.	Ea.	Cat.	pFd.	Dia.	Ea
165-CE-151	150	A	**$0.18**	**165-CF-152**	1500	B	**$0.1**
165-CE-221	220	A	**.18**	**165-CF-182**	1800	B	**.1**
165-CE-331	330	A	**.18**	**165-CF-202**	2000	C	**.2**
165-CE-471	470	A	**.18**	**165-CF-222**	2200	C	**.2**
165-CE-501	500	B	**.18**	**165-CF-332**	3300	C	**.2**
165-CE-561	560	B	**.18**	**165-CF-392**	3900	C	**.2**
165-CE-681	680	B	**.18**	**165-CF-472**	4700	D	**.2**
165-CE-751	750	B	**.18**	**165-CF-502**	5000	D	**.2**
165-CE-801	800	B	**.18**	**165-CF-622**	6200	D	**.2**
165-CE-102	1000	C	**.18**	**165-CF-822**	8200	E	**.2**
165-CF-122	1200	B	**.18**	**165-CF-103**	10000	E	**.2**

CPR POLYSTYRENE FOIL



Ideal for application where an unusually long life expectancy is required. They also have many applications in TV and radio, where they out-perform micas and mylars. Temp. Range: -40°C. to +85°C Voltage: 500 VDCW, 1500 VDCT (one end color coded black) Tolerance ± 5%. Leakage resistance is greater than 100,000 megs. They exceed other foil capacitors, in life span, reliability and freedom from drift, and they have a higher Q than any other equivalen type. Size: (A) .434" length, .165" to .434" dia. (B) .631" length, .228" to .346" dia. (C) .827" length, .346" to .504" dia

Cat.	pFd.	Size	Ea.	Cat.	pFd.	Size	Ea
165-CPR-20J	20	A	**$0.15**	**165-CPR-560J**	560	B	**$0.1**
165-CPR-24J	24	A	**.15**	**165-CPR-680J**	680	B	**.1**
165-CPR-30J	30	A	**.15**	**165-CPR-820J**	820	B	**.1**
165-CPR-36J	36	A	**.15**	**165-CPR-1000J**	1000	B	**.1**
165-CPR-43J	43	A	**.15**	**165-CPR-1200J**	1200	B	**.1**
165-CPR-56J	56	A	**.15**	**165-CPR-1500J**	1500	B	**.1**
165-CPR-68J	68	A	**.15**	**165-CPR-1800J**	1800	B	**.1**
165-CPR-82J	82	A	**.15**	**165-CPR-2200J**	2200	B	**.1**
165-CPR-100J	100	A	**.15**	**165-CPR-2500J**	2500	B	**.1**
165-CPR-120J	120	A	**.15**	**165-CPR-3000J**	3000	B	**.1**
165-CPR-150J	150	A	**.15**	**165-CPR-3600J**	3600	C	**.2**
165-CPR-180J	180	A	**.15**	**165-CPR-4300J**	4300	C	**.2**
165-CPR-220J	220	A	**.15**	**165-CPR-5000J**	5000	C	**.2**
165-CPR-270J	270	A	**.15**	**165-CPR-5600J**	5600	C	**.2**
165-CPR-330J	330	A	**.15**	**165-CPR-6800J**	6800	C	**.2**
165-CPR-390J	390	A	**.15**	**165-CPR-8200J**	8200	C	**.2**
165-CPR-470J	470	A	**.15**	**165-CPR-10000J**	10000	C	**.2**



FEED-THRU

CAPACITORS

For use in high frequency circuit where both a feed through and a capacity ground to either chassis or shield is desired. Lead inductanc is virtually eliminated. Eyelet model MFT fits .160" hole, solder into place. Bushing model FT has #12-28 threaded portion, wit nut, locks into .220" hole. Working voltage 500 VDC, test 100 VDC.

Type FT (B)

Cat.	pFd.		Tol.%
165-FT-500	500		±20
165-FT-1000	1000		±20
165-FT-1500	1500	-20	+50
165-FT-1800	1800	-20	+50
165-FT-2300	2300	-20	+50
Sizes above, each			**$0.75**

Type MFT (A)

Cat.	pFd.	Tol.
165-MFT-50	50	±1
165-MFT-100	100	±1
165-MFT-500	500	±2
165-MFT-1000	1000	GM
Sizes above, each		**$0.3**

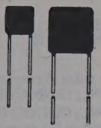
TYPE CI AC LINE DISC

1400 WVDC

Recommended for AC by-pass application or where a steady c intermittent higher voltage may occur. U/L approved. Suitable f continuous operation at 220 VAC, rms, 60 hertz. Tol. ±20%

Cat.	Cap.	Dia.	Ea.	Pkg. 10
165-CI-471	470pF	.440"	**$0.18**	**$14.3**
165-CI-681	680pF	.440"	**.18**	**14.3**
165-CI-102	1,000pF	.640"	**.21**	**16.6**
165-CI-222	2,200pF	.640"	**.18**	**14.3**
165-CI-502	5,000pF	.730"	**.18**	**14.3**
165-CI-103	10,000pF	.840"	**.24**	**19.0**

CENTRALAB



MONO-KAP™ MINIATURE MONOLITHIC CERAMIC CAPACITORS

Mono-Kap capacitors provide very high capacitance in an extremely small size radial lead, epoxy coated ceramic capacitor. Leads are solder coated copper clad steel. Insulation resistance: 100K megohms or 1000 megohms-microfarads, whichever is less at 25°C, 100 VDCW applied. *See size code table below.

CW-SERIES W5R CHARACTERISTIC, 100 VDCW

Temperature vs capacitance: EIA "W5R" ±15% maximum capacity change from +25°C reading over temperature range of -55°C to +125°C. Dissipation factor: 2.5% maximum at 1 KHz and +25°C, Tolerance 10%. Rated at 100 VDCW.

Cat. No.	Cap. Mfd	Size Code*	Net 1-49	50-99	100-199
165-CW-10A151K	.00015	10	$0.48	$0.35	$0.28
165-CW10A221K	.00022	10	.48	.35	.28
165-CW10A331K	.00033	10	.48	.35	.28
165-CW15A471K	.00047	15	.30	.22	.18
165-CW15A681K	.00068	15	.30	.22	.18
165-CW20A102K	.0010	20	.39	.29	.23
165-CW20A152K	.0015	20	.39	.29	.23
165-CW20A222K	.0022	20	.39	.29	.23
165-CW20A332K	.0033	20	.39	.29	.23
165-CW20A472K	.0047	20	.48	.35	.28
165-CW20A682K	.0068	20	.48	.35	.28
165-CW20A103K	.01	20	.48	.35	.28
165-CW30A153K	.015	30	.99	.72	.59
165-CW30A223K	.022	30	.99	.72	.59
165-CW30A333K	.033	30	1.08	.79	.64
165-CW30A473K	.047	30	1.08	.79	.64
165-CW30A683K	.068	30	1.32	.96	.79
165-CW30A104K	.1	30	1.32	.96	.79
165-CW40A224K	.22	40	3.00	2.20	1.80
165-CW50A334K	.33	50	4.98	3.65	2.98
165-CW50A474K	.47	50	5.88	4.31	3.52
165-CW50A564K	.56	50	6.69	4.90	4.01

CY SERIES CHARACTERISTIC (GENERAL PURPOSE)

Temperature vs capacitance: EIA "Y5V" +22%, -82% maximum capacity change from +25°C reading over temperature range of -30°C to +85°C. Dissipation factor: 2.5% maximum at 1 KHz and +25°C. Tolerance ±20%.

50 VDCW

Cat. No.	Cap. Mfd	Size Code*	Net 1-49	50-99	100-199
165-CY15C103M	.01	15	$0.36	$0.26	$0.22
165-CY20C153M	.015	20	.60	.44	.36
165-CY20C223M	.022	20	.60	.44	.36
165-CY20C333M	.033	20	.60	.44	.36
165-CY20C473M	.047	20	.60	.44	.36
165-CY20C683M	.068	20	.63	.46	.37
165-CY20C104M	.1	20	.63	.46	.37
165-CY20C154M	.15	20	.72	.52	.43
165-CY30C224M	.22	30	1.44	1.05	.86
165-CY30C334M	.33	30	1.56	1.14	.93
165-CY30C474M	.47	30	1.56	1.14	.93
165-CY30C684M	.68	30	1.86	1.36	1.11
165-CY30C105M	1.0	30	1.86	1.36	1.11
165-CY40C155M	1.5	40	3.39	2.48	2.03
165-CY30C225M	2.2	30	2.40	1.76	1.44
165-CY50C335M	3.3	50	5.85	4.29	3.51
165-CY50C475M	4.7	50	7.89	5.78	4.73

100 VDCW

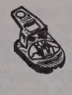
Cat. No.	Cap. Mfd	Size Code*	Net 1-49	50-99	100-199
165-CY20A682M	.0068	20	.60	.44	.36
165-CY20A103M	.01	20	.60	.44	.36
165-CY20A153M	.015	20	.60	.44	.36
165-CY20A223M	.022	20	.60	.44	.36
165-CY20A333M	.033	20	.60	.44	.36
165-CY20A473M	.047	20	.60	.44	.36
165-CY20A683M	.068	20	.63	.46	.37
165-CY20A104M	.1	20	.63	.46	.37
165-CY30A154M	.15	30	1.44	1.05	.86
165-CY30A224M	.22	30	1.44	1.05	.86
165-CY30A334M	.33	30	1.56	1.14	.93
165-CY30A474M	.47	30	1.56	1.14	.93
165-CY40A684M	.68	40	2.88	2.11	1.72
165-CY30A105M	1.0	30	1.92	1.40	1.15
165-CY50A155M	1.5	50	5.04	3.69	3.02
165-CY50A225M	2.5	50	5.58	4.09	3.34

SIZE CODE CHART

Size Code	10	15	20	30	40	50
Max. Lgth.	.100"	.150"	.200"	.300"	.400"	.500"
Max. Wdth.	.100"	.150"	.200"	.300"	.400"	.500"
Max. Dpth.	.100"	.100"	.125"	.150"	.150"	.200"

CERAMIC TRIMMERS

827


820

822

823

829

Screwdriver adjustment. Full capacity range thru 180°. Voltage rating: 500 v-dc working. Power factor less than .2% at 1 Mhz. insulation resistance: 10,000 megohms min.

TYPE 827 TRIMMERS

High grade phenolic mounting plate has two .120" mounting holes spaced 5/16". Mounts thru 9/16" dia. hole in chassis. Body size 17/32" x 3/4".

Cat.	pFd. Range	Cat.	pFd. Range
165-827A	2.5 to 7	165-827C	6.0 to 30
165-827B	3.5 to 12	165-827D	7.0 to 35

Any Type 827 Trimmer Above, Each **Net $.90**

TYPE 820 TRIMMERS

Mounting holes (with bracket removed) clear #4 machine screws. Basic size 5/8" wide x 27/32" long. *Less bkt.

Cat.	pFd. Range	Cat.	pFd. Range
165-820D	1.0 to 3.5	165-820E*	35 to 55
165-820A	2.5 to 6.0		
165-820B	5.0 to 20		
165-820C	7.0 to 35		

Any Type 820 Trimmer Above, Each **Net $1.14**

TYPE 822 TRIMMERS

Mounting holes clear #4 machine screws. Basic body size 21/32" wide x 27/32" long.

NPO TC		N650 TC	
Cat.	pFd. Range	Cat.	pFd. Range
165-822DZ	1.5 to 3.0	165-822DN	2.0 to 6.0
165-822EZ	1.5 to 7.0	165-822EN	4.0 to 30
165-822CZ	2.0 to 7.5	165-822CN	4.5 to 25
165-822BZ	2.5 to 13	165-822BN	7.0 to 45
165-822FZ	3.0 to 12	165-822AN	8.0 to 50
165-822AZ	4.5 to 25		

Any Type 822 Trimmer Above, Each **Net $1.14**

TYPE 823 TRIMMERS

Mounting studs set in base are tapped for #4-40 machine screws. Body size 15/16" wide x 1-7/32" long.

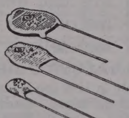
NPO TC		N650 TC	
Cat.	pFd. Range	Cat.	pFd. Range
165-823BZ	10 to 50	165-823DN	8 to 50
165-823AZ	12 to 62	165-823BN	10 to 100
		165-823AN	20 to 125

Any Type 823 Trimmer Above, Each **Net $3.60**

TYPE 829 TRIMMERS

Tubular type. Mounting is by means of a locknut against metal panel or chassis which has been punched with .152" dia. hole with .225" x .106" locking notches.

Cat.	pFd. Range	Cat.	pFd. Range
165-829-3	0.5 to 3.0	165-829-7	1.0 to 7.5
165-829-4	1.0 to 4.0	165-829-10	1.5 to 10
165-829-6	1.0 to 6.0		
Sizes Above, Each	**$.30**	**Sizes Above, Each**	**$.30**

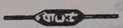


GAP-CAP™

This parallel capacitor-spark gap combination is useful in applications which require bypassing of transient over-voltages. This built-in protector allows the stray transient to be harmlessly bypassed. Size: (DxHxT) GAP-R75 = .440" x .620" x .250"; GAP-103 = .705" x .830" x .195"; GAP-402 = .935" x 1.060" x .216". #20 tinned leads.

Cat. No.	Cap. mF.	Voltage		Tolerance	Net 1-99
		Wrkg.	Arc		
165-GAP-R75	.75pf	1KV	1-2KV	Maximum	$0.21
165-GAP-102	.001	1KV	2-3KV	±20%	.21
165-GAP-103	.01	1.5KV	2-3KV	±20%	.36
165-GAP-203	.02	1KV	2-3KV	±20%	.58
165-GAP-402	.004	3KV	4-6KV	±10%	.66

1% METAL-FILM RESISTORS



1% MOLDED METAL FILM & EPOXY COATED RESISTORS

EVAPORATED METAL-FILM RESISTORS

Precision ±1% evaporated metal-film resistors with a special moisture and proofing encapsulation identified by its gray color. Temperature coefficient characteristics: (RN55D) 0± 100 ppm/°C, -55C to +165°C.; (RN60D) 0± 100 ppm/°C, -55C to +165°C.; (RN60C) 0± 50 ppm/°C, -55C to +175°C. (RN65D) 0± 100 ppm/°C., -55C to +165°C.; (RN70D) 0± 100 ppm/°C., -55C to +165°C.; (RN70C) 0± 50ppm/°C., -55C to +175°C.; (RN70E) 0± 25 ppm/°C, -55C to +175°C. Low noise level: 3 sigma of the noise level is below 0.1 microvolt/volt over the audible spectrum. Voltage coefficient when measured between 1/10 and full rated voltage is less than 5 ppm/volt for al values. Power ratings are based on 125°C ambient. Leads are 1½", ±1/8" long, alloy coated; may be dip-soldered to printed circuit chassis Resistance tolerance and TC code stamped on each unit. Specify values desired when ordering. If you require a MIL spec unit, pleas specify and add (MIL) after the RN number. *Ambient. *Include complete Cat. No. when ordering, i.e., 750-RN55D.

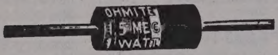
								Each		Each Assorted Min. 25 per Value			
Cat. 750-*	**Wattage 125°C**	**Rating* 70°C**	**Continuous Max. Volts**	**Body Length**	**Body Dia.**	**Lead Gauge**	**Resistance Values See Table "A"**	**Net 1-24**	**25-99**	**100-249**	**250-499**	**500-999**	**1000-999**
RN55D	1/10	1/8	250	.250"	.090"	#22	10 to 499K Ohm	$1.05	$0.48	$0.24	$0.18	$0.15	$0.12
RN60D	1/8	1/2	300	.400"	.140"	#22	10 to 1 Megohm	1.05	.48	.24	.18	.15	.12
RN60C	1/8	1/4	300	.400"	.140"	#22	30.1 to 1 Megohm	1.44	.66	.32	.20	.19	.15
RN65D	¼	½	300	.594"	.203"	#22	10 to 1 Megohm	$1.05	$0.48	$0.24	$0.18	$0.15	$0.12
RN70D	½	¾	350	.719"	.261"	#20	10 to 1.5 Megohm	1.05	.48	.24	.18	.15	.12
RN70C	½	¾	350	.719"	.261"	#20	24.9 to 1.5 Megohm	1.44	.66	.32	.20	.19	.15
RN70E	½	¾	350	.719"	.261"	#20	24.9 to 1.5 Megohm	1.77	1.07	.72	.51	.50	.28

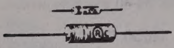
TABLE "A" STANDARD RESISTANCE DECADE VALUES

Multiply values shown in decades of X10, X100, X1000, X10,000 Etc. to get higher available resistance values. *Denotes preferred value

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohm
1.00*	1.15	1.33*	1.54	1.78*	2.05	2.37*	2.74	3.16*	3.65	4.22*	4.87	5.62*	6.49	7.50*	8.66
1.02	1.18	1.37	1.58	1.82	2.10	2.43	2.80	3.24	3.74	4.32	4.99	5.76	6.65	7.68	8.87
1.05	1.21*	1.40	1.62*	1.87	2.15*	2.49	2.87*	3.32	3.83*	4.42	5.11*	5.90	6.81*	7.87	9.09
1.07	1.24	1.43	1.65	1.91	2.21	2.55	2.94	3.40	3.92	4.53	5.23	6.04	6.98	8.06	9.31
1.10*	1.27	1.47*	1.69	1.96*	2.26	2.61*	3.01	3.48*	4.02	4.64*	5.36	6.19*	7.15	8.25*	9.53
1.13	1.30	1.50	1.74	2.00	2.32	2.67	3.09	3.57	4.12	4.75	5.49	6.34	7.32	8.45	9.76

CARBON COMPOSITION RESISTORS





COMPOSITION RESISTORS

FOR ALL TV, RADIO & ELECTRONIC USES

Completely enclosed in molded composition, with securely attached solid tinned wire leads. They confor with all requirements of military specifications MIL-R-11C, including salt water immersion and humidit tests. They are noted for great stability, low noise level, low voltage coefficient, high insulation break dow voltage and rapid heat dissipation. Available only in the Standard EIA Values and Tolerances as listed belov All resistance values are available in 5% tolerance.

10% TOLERANCE VALUES

		May be assorted (Min. 10 per value)			May be asst'd. (100/value)	
Cat. 766-*	**Standard Resistance Values (Table below)**	**10-99**	**100-249**	**250-499**	**500-999**	**1000-Up**
1/8W-10%	2.7 to 8.2 Ohms	$.125	$.117	$.112	$.108	$.105
1/8W-10%	10 to 22 Meg.	.112	.106	.102	.098	.095
1/4W-10%	2.7 to 22 Meg.	.06	.05	.04	.03	.02
1/2W-10%	1.0 to 22 Ohms	.07	.05	.05	.04	.034
1/2W-10%	2.9 to 22 Meg.	.06	.04	.033	.025	.019
1W-10%	2.7 to 22 Meg.	.09	.05	.046	.04	.03
2W-10%	10 to 22 Meg.	.19	.10	.089	.081	.06

5% TOLERANCE VALUES

		May be assorted (Min. 10 per value)			May be Asst' (100/value)	
Cat. 766-*	**Standard Resistance Values (Table below)**	**10-99**	**100-249**	**250-499**	**500-999**	**1000 Up**
1/8W-5%	2.7 to 9.1 Ohm	$.175	$.165	$.158	$.153	$.14
1/8W-5%	10 to 22 Meg.	.158	.15	.144	.139	.13
1/4W-5%	2.7 to 22 Meg.	.10	.07	.063	.053	.03
1/2W-5%	1.0 to 2.4 Ohm	.14	.095	.091	.073	.06
1/2W-5%	2.7 to 22 Meg.	.12	.06	.052	.044	.03
1W-5%	2.7 to 22 Meg.	.18	.08	.077	.069	.06
2W-5%	10 to 22 Meg.	.30	.15	.148	.135	.11

STANDARD EIA VALUES CHART FOR COMPOSITION RESISTORS

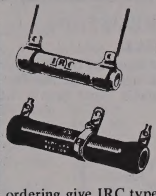
Resistances shown with asterisk (*) available only in 10% tolerance. All resistance values shown are available in 5% tolerance.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
.24	.75	2.4	7.5	24	75	240	750	2.4K	7.5K	24K	75K	240K	750K	2.4 Meg	7.5 Me
.27*	.82*	2.7*	8.2*	27*	82*	270*	820*	2.7K*	8.2K*	27K*	82K*	270K*	820K*	2.7 Meg*	8.2 Me
.30	.91	3.0	9.1	30	91	300	910	3K	9.1K	30K	91K	300K	910K	3.0 Meg	9.1 Me
.33*	1.0*	3.3*	10*	33*	100*	330*	1K*	3.3K*	10K*	33K*	100K*	330K*	1 Meg*	3.3 Meg*	10 Me
.36	1.1	3.6	11	36	110	360	1.1K	3.6K	11K	36K	110K	360K	1.1 Meg	3.6 Meg	11 Me
.39*	1.2*	3.9*	12*	39*	120*	390*	1.2K*	3.8K*	12K*	39K*	120K*	390K*	1.2 Meg*	3.9 Meg*	12 Me
.43	1.3	4.3	13	43	130	430	1.3K	4.3K	13K	43K	130K	430K	1.3 Meg	4.3 Meg	13 Me
.47*	1.5*	4.7*	15*	47*	150*	470*	1.5K*	4.7K*	15K*	47K*	150K*	470K*	1.5 Meg*	4.7 Meg*	15 Me
.51	1.6	5.1	16	51	160	510	1.6K	5.1K	16K	51K	160K	510K	1.6 Meg	5.1 Meg	16 Me
.56*	1.8*	5.6*	18*	56*	180*	560*	1.8K*	5.6K*	18K*	56K*	180K*	560K*	1.8 Meg*	5.6 Meg*	18 Me
.62	2.0	6.2	20	62	200	620	2K	6.2K	20K	62K	200K	620K	2.0 Meg	6.2 Meg*	20 Me
.68*	2.2*	6.8*	22*	68*	220*	680*	2.2K*	6.8K*	22K*	68K*	220K*	680K*	2.2 Meg*	6.8 Meg	22 Me

IRC PWW RESISTORS

STOCK PWW RESISTORS

Res. Ohms	FIXED					ADJUSTABLE				
	10 W.	25 W.	50 W.	100 W.	200 W.	10 W.	25 W.	50 W.	100 W.	200 W.
1	●	●	●	●	●	●	●	●	●	●
1.5	●	...	...	...	...	...	...	...	...	...
2	●	●	●	●	●	●	●	●	●	●
3	●	●	●	●	●	●	●	●	●	●
4	●	●	●	●	●	...	...	●	●	●
5	●	●	●	●	●	●	●	●	●	●
7.5	●	...	...	...	...	●	●	...	...	...
10	●	●	●	●	●	●	●	●	●	●
12	●	...	...	...	...	...	...	...	...	...
15	●	●	...	...	...	●	●	...	...	...
20	●	...	...	...	...	●	●	...	...	...
25	●	●	●	●	●	●	●	●	●	●
30	●	...	...	...	...	...	...	...	...	...
35	●	...	...	...	...	...	...	...	...	...
40	●	...	...	...	...	...	...	...	...	...
50	●	●	●	●	●	●	●	●	●	●
75	●	●	●	●	●	●	●	●	...	...
100	●	●	●	●	●	●	●	●	●	●
125	●	...	...	●	...	...	...	...	...	...
150	●	●	●	●	●	●	●	●	...	...
200	●	●	●	...	...	●	●	●	...	...
225	●	...	...	...	...	...	...	...	...	...
250	●	●	●	●	●	●	●	●	●	●
300	●	...	...	...	...	●	●	●	...	...
350	●	...	...	...	...	●	...	...	...	...
400	●	...	...	...	...	●	●	●	...	...
450	●	...	...	...	...	...	...	...	...	...
500	●	●	●	●	●	●	●	●	●	●
600	●	...	...	...	...	●	...	...	...	...
700	●	...	...	...	...	...	...	...	...	...
750	●	●	●	●	●	●	●	●	...	...
800	●	●	●	...	...	●	●	●	...	...
900	●	...	...	...	...	...	...	...	...	...
1K	●	●	●	●	●	●	●	●	●	●
1.1K	●	...	...	...	...	...	...	...	...	...
1.2K	●	...	...	...	...	...	...	...	...	...
1.25K	●	...	...	...	...	●	●	●	...	...
1.5K	●	●	●	●	●	●	●	●	●	●
1.75K	●	...	...	...	...	...	...	...	...	...
2K	●	●	●	●	●	●	●	●	...	...
2.25K	●	...	...	...	...	●	●	●	...	...
2.5K	●	●	●	●	●	●	●	●	●	●
3K	●	●	●	●	●	●	●	●	...	...
3.5K	●	●	...	...	...	●	●	●	...	...
4K	●	●	●	...	...	●	●	●	...	...
4.5K	●	...	...	...	...	●	●	●	...	...
5K	●	●	●	●	●	●	●	●	●	●
6K	●	●	...	...	...	●	●	●	...	...
7K	●	...	...	...	...	●	●	●	...	...
7.5K	●	●	●	●	●	●	●	●	...	...
8K	●	...	●	...	...	●	●	●	...	...
8,5K	●	...	...	...	...	●	...	...	...	...
9K	●	...	...	...	...	●	●	●	...	...
10K	●	●	●	●	●	●	●	●	●	●
11K	●	...	...	...	...	...	...	...	...	...
12K	●	●	●	...	...	...	●	●	...	...
12.5K	●	...	...	...	...	...	...	...	...	...
13.5K	●	...	...	...	...	...	...	...	...	...
15K	●	●	●	●	●	...	●	●	●	●
16K	●	...	...	...	...	...	...	...	...	...
17.5K	●	...	...	...	...	...	...	...	...	...
18K	●	...	...	...	...	...	...	...	...	...
20K	●	●	●	●	●	...	●	●	●	●
22.5K	●	...	...	...	...	...	...	...	...	...
25K	●	●	●	●	●	...	●	●	●	●
30K	●	●	...	●	●	...	...	●	●	●
35K	●	●	●	...	...	...	...	...	...	...
40K	●	●	...	●	●	...	...	●	●	●
45K	●	...	...	...	...	...	...	...	...	...
50K	●	●	●	●	●	...	...	●	●	●
60K	...	●	...	●	●	...	...	●	...	...
70K	...	●	...	...	...	...	...	...	...	...
75K	...	...	●	●	●	...	...	...	●	●
80K	...	●	...	...	...	...	...	●	...	...
100K	...	●	●	●	●	...	...	●	●	●
125K	...	...	●	...	...	...	...	...	...	...
150K	...	...	●	...	...	...	...	...	...	...
175K	...	...	●	...	...	...	...	...	...	...
200K	...	...	●	...	...	...	...	...	...	...
250K	...	...	●	...	...	...	...	...	...	...



WITH RESISTEG COATING

IRC PWW Resistors are available from stock only in the standard stock resistors shown in the table at the left. IRC PWW Resistors are wound of copper-nickel or chrome-nickel resistance wire on ceramic tubes. The special Resisteg coating gives rapid heat dissipation and protects the resistance winding. Types 1¾A and has solid wire leads. All other types have hot-dipped tinned terminals for screw or solder connection. Adjustable types have one slider for adjusting resistor tap. Resistance tolerance: fixed ± 5%; adjustable ± 10%. When ordering give IRC type number and resistance in ohms. Example: 2D-10K ohms.

FIXED RESISTORS

10-12 WATT TYPE 1¾A

Size 1¾" x 5/16"

Ohms Res.	Ea. 1-9	10-24	25-99	100-249
1 thru 1K	$.63	$.54	$.44	$.38
1.1K thru 5K	.67	.57	.47	.40
6K thru 10K	.78	.66	.55	.47
11K thru 20K	.87	.74	.61	.52
22.5K thru 40K	.91	.77	.64	.55
45K & 50K	1.05	.89	.74	.63

25 WATT TYPE 2D

Size 2" x 9/16"

1 thru 1K	.80	.68	.56	.48
1.5K thru 5K	.83	.71	.58	.50
6K thru 10K	.93	.79	.65	.56
12K thru 20K	1.00	.85	.70	.60
25K thru 40K	1.15	.98	.81	.69
50K & 60K	1.35	1.15	.95	.81
70K & 80K	1.55	1.32	1.09	.93
100K	1.80	1.53	1.26	1.08

50 WATT TYPE 4D

Size 4" x 9/16".

1 thru 1K	1.25	1.06	.88	.75
1.5K thru 5K	1.25	1.06	.88	.75
7.5K thru 10K	1.35	1.15	.95	.81
12K thru 20K	1.50	1.28	1.05	.90
25K & 35K	1.70	1.45	1.19	1.02
50K	1.90	1.62	1.33	1.14
75K	2.15	1.83	1.51	1.29
100K	2.35	2.00	1.65	1.41
125K	2.85	2.42	2.00	1.71
150K	3.00	2.55	2.10	1.80
175K	3.10	2.64	2.17	1.86
200K	3.20	2.72	2.24	1.92
250K	3.55	3.02	2.49	2.13

100 WATT TYPE 6½E

Size 6½" x ¾".

1 thru 1K	1.70	1.45	1.19	1.02
1.5K thru 5K	1.75	1.49	1.23	1.05
7.5K & 10K	1.90	1.62	1.33	1.14
15K & 20K	2.05	1.74	1.44	1.23
25K thru 40K	2.35	2.00	1.65	1.41
50K & 60K	2.45	2.08	1.72	1.47
75K	2.70	2.30	1.89	1.62
100K	3.05	2.59	2.14	1.83

200-225 WATT TYPE 10½H

Size 10½" x 1-1/8".

1 thru 1K	2.70	2.30	1.89	1.62
1.5K thru 5K	2.80	2.38	1.96	1.68
7.5K & 10K	3.00	2.55	2.10	1.80
15K & 20K	3.20	2.72	2.24	1.92
25K thru 40K	3.30	2.81	2.31	1.98
50K & 60K	3.40	2.89	2.38	2.04
75K	3.60	3.06	2.52	2.16
100K	3.80	3.23	2.66	2.28

ADJUSTABLE RESISTORS

10-12 WATT TYPE 1¾AA

Size 1¾" x 5/16".

Ohms Res.	Ea. 1-9	10-24	25-99	100 249-
1 thru 1K	$1.25	$1.00	$.88	$.75
1.25K thru 5K	1.30	1.11	.91	.78
6K thru 10K	1.40	1.19	.98	.84

25 WATT TYPE 2DA

Size 2" x 9/16".

1 thru 1K	1.40	1.19	.98	.84
1.25K thru 5K	1.45	1.23	1.02	.87
6K thru 10K	1.55	1.32	1.09	.93
12K thru 20K	1.60	1.36	1.12	.96
25K	1.75	1.49	1.23	1.05

50 WATT TYPE 4DA

Size 4" x 9/16".

1 thru 1K	1.85	1.57	1.30	1.11
1.25K thru 5K	1.90	1.62	1.33	1.14
6K thru 10K	2.00	1.70	1.40	1.20
12K thru 20K	2.10	1.79	1.47	1.26
25K thru 40K	2.35	2.00	1.65	1.41
50K & 60K	2.50	2.13	1.75	1.50
80K	2.80	2.38	1.96	1.68
100K	3.00	2.55	2.10	1.80

100 WATT TYPE 6½EA

Size 6½" x ¾".

1 thru 1K	1.70	1.45	1.19	1.02
1.5K thru 5K	1.75	1.49	1.23	1.05
10K	1.90	1.62	1.33	1.14
15K & 20K	2.05	1.74	1.44	1.23
25K thru 40K	2.35	2.00	1.65	1.41
50K	2.45	2.08	1.72	1.47
75K	2.70	2.30	1.89	1.62
100K	3.05	2.59	2.14	1.83

200-225 WATT TYPE 10½HA

Size 10½" x 1-1/8".

1 thru 1K	3.70	3.15	2.59	2.22
1.5K thru 5K	3.75	3.19	2.63	2.25
10K	3.95	3.36	2.77	2.37
15K & 20K	4.15	3.53	2.91	2.49
25K thru 40K	4.25	3.61	2.98	2.55
50K	4.35	3.70	3.05	2.61
75K	4.55	3.87	3.19	2.73
100K	4.80	4.08	3.36	2.88

EXTRA SLIDERS

For use on the adjustable resistors above when more than one tap is required.

Cat.	Use On	Each
5-A	1¾AA	$0.15
5-D	2DA, 4DA	.15
5-E	6½EA	.15
5-H	10½HA	.25

AXIAL LEAD PW5 & PW10

Wire-wound units in 3/8" x 11/32" x PW5 7/8", PW10 1-7/8" heat-dissipating ceramic cases. Lead length 1½". Tolerance ± 10%.

Cat. No.	Net 1-99	100-Up
5-PW5	$0.25	$0.17
5-PW10	.36	.28

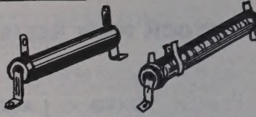
Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
.15**	4	100	750	3K	8.5K*
.22**	5	120	800	3.3K	9K*
.27**	5.6	125	820	3.5K	10K*
.33**	7.5	150	900	3.9K	12K*
.47**	10	200	1K	4K	12.5K*
.51**	15	250	1.2K	4.5K	15K*
.56**	20	300	1.25K	5K	20K*
.68**	25	350	1.5K	6K	25K*
.82**	30	400	1.75K	7K*	. . . .
1	40	500	2K	7.5K*	. . . .
2	50	600	2.25K	8K*	. . . .
3	75	700	2.5K	8.2K*	. . . .

*Only in PW10. **Only in PW5.

OHMITE PWW RESISTORS

VITREOUS ENAMELED RESISTORS

FIXED & ADJUSTABLE



Wire-wound on high quality ceramic cores, protected and insulated by Ohmite vitreous enamel. Resistance tolerance is ±5% for 1 ohm or higher. Wattage ratings are for use in free air. Mounting brackets are supplied in each package. Adjustable types have a slider that can be adjusted for desired resistance value. Tolerance is ±10%.

FIXED RESISTORS

	25 WATT Size 2" x 9/16"				50 WATT Size 4" x 9/16"			
Res. Ohms	Cat. No.	Net 1-9	10-24	25-99	Cat. No.	Net 1-9	10-24	25-99
1	55-0200J	$0.92	$0.78	$0.64	55-0400J	$1.95	$1.66	$1.37
2	55-0200K	.92	.78	.64	55-0400K	1.45	1.23	1.02
3	55-0200L	.92	.78	.64	55-0400L	1.45	1.23	1.02
5	55-0200A	.92	.78	.64	55-0400A	1.45	1.23	1.02
10	55-0200B	.92	.78	.64	55-0400B	1.45	1.23	1.02
15	55-0200R	.92	.78	.64	....	....	....	....
25	55-0200C	.92	.78	.64	55-0400C	1.45	1.23	1.02
50	55-0200D	.92	.78	.64	55-0400D	1.45	1.23	1.02
75	55-0200E	.92	.78	.64	55-0400E	1.45	1.23	1.02
100	55-0200F	.92	.78	.64	55-0400F	1.45	1.23	1.02
150	55-0200G	.92	.78	.64	55-0400G	1.45	1.23	1.02
200	55-0200H	.92	.78	.64	55-0400H	1.45	1.23	1.02
250	55-0201	.92	.78	.64	55-0401	1.45	1.23	1.02
500	55-0202	.92	.78	.64	55-0402	1.45	1.23	1.02
750	55-0203	.92	.78	.64	55-0403	1.45	1.23	1.02
1K	55-0205	.92	.78	.64	55-0405	1.45	1.23	1.02
1.5K	55-0206	.95	.81	.67	55-0406	1.45	1.23	1.02
2K	55-0207	.95	.81	.67	55-0407	1.45	1.23	1.02
2.5K	55-0208	.95	.81	.67	55-0408	1.45	1.23	1.02
3K	55-0209	.95	.81	.67	....	....	....	....
5K	55-0212	.95	.81	.67	55-0411	1.45	1.23	1.02
7.5K	55-0214	1.15	.98	.81	....	....	....	....
10K	55-0215	1.15	.98	.81	55-0414	1.55	1.32	1.09
15K	55-0217	1.20	1.02	.84	55-0416	1.70	1.45	1.19
20K	55-0218	1.20	1.02	.84	....	....	....	....
25K	55-0219	1.30	1.11	.91	....	....	....	....
50K	55-0224	1.55	1.32	1.09	....	....	....	....

	100 WATT Size 6½" x 3/4"				225 WATT Size 10½" x 1-1/8"			
1	55-0600C	$2.80	$2.38	$1.96	55-0900C	$4.70	$4.00	$3.29
2	55-0600D	2.80	2.38	1.96	55-0900D	4.70	4.00	3.29
5	55-0600A	2.00	1.70	1.40	55-0900A	4.70	4.00	3.29
10	55-0600B	2.00	1.70	1.40	55-0900B	3.30	2.81	2.31
25	55-0601	2.00	1.70	1.40	55-0901	3.30	2.81	2.31
50	55-0602	2.00	1.70	1.40	55-0902	3.30	2.81	2.31
100	55-0604	2.00	1.70	1.40	55-0904	3.30	2.81	2.31
250	55-0606	2.00	1.70	1.40	55-0906	3.30	2.81	2.31
500	55-0607	2.00	1.70	1.40	55-0907	3.30	2.81	2.31
1K	55-0609	2.00	1.70	1.40	55-0909	3.30	2.81	2.31
1.5K	....	....	....	....	55-0910	3.35	2.85	2.35
2.5K	55-0612	2.05	1.74	1.44	55-0912	3.35	2.85	2.35
5K	55-0614	2.05	1.74	1.44	55-0914	3.35	2.85	2.35
10K	....	....	...	...	55-0916	3.75	3.19	2.63
100K	55-0625	3.45	2.93	2.42	55-0925	4.70	4.00	3.29

ADJUSTABLE RESISTORS

	25 WATT Size 2" x 9/16"				50 WATT Size 4" x 9/16"			
Res. Ohms	Cat. No.	Net 1-9	10-24	25-99	Cat. No.	Net 1-9	10-24	25 9
1	55-0360	$1.65	$1.40	$1.16	55-0560A	$2.80	$2.38	$1.9
2	55-0360B	1.65	1.40	1.16	55-0560B	2.20	1.87	1.5
3	55-0361	1.65	1.40	1.16	55-0560C	2.20	1.87	1.5
5	55-0362	1.65	1.40	1.16	55-0560	2.20	1.87	1.5
10	55-0363	1.65	1.40	1.16	55-0561	2.20	1.87	1.5
15	55-0364	1.65	1.40	1.16	....	....	....	...
25	55-0365	1.65	1.40	1.16	55-0562	2.20	1.87	1.5
50	55-0366	1.65	1.40	1.16	55-0563	2.20	1.87	1.5
75	55-0367	1.65	1.40	1.16	55-0564	2.20	1.87	1.5
100	55-0368	1.65	1.40	1.16	55-0565	2.20	1.87	1.5
150	55-0369	1.65	1.40	1.16	55-0566	2.20	1.87	1.5
200	55-0370	1.65	1.40	1.16	55-0567	2.20	1.87	1.5
250	55-0371	1.65	1.40	1.16	55-0568	2.20	1.87	1.5
500	55-0372	1.65	1.40	1.16	55-0569	2.20	1.87	1.5
750	55-0373	1.65	1.40	1.16	55-0570	2.20	1.87	1.5
1K	55-0375	1.65	1.40	1.16	55-0572	2.20	1.87	1.5
1.5K	55-0376	1.70	1.45	1.19	55-0573	2.25	1.91	1.5
2K	55-0377	1.70	1.45	1.19	55-0574	2.25	1.91	1.5
2.5K	55-0378	1.70	1.45	1.19	55-0575	2.25	1.91	1.5
3K	55-0379	1.70	1.45	1.19	55-0576	2.25	1.91	1.5
5K	55-0382	1.70	1.45	1.19	55-0578	2.25	1.91	1.5
7.5K	55-0384	1.80	1.53	1.26	....	....	....	...
10K	55-0385	1.80	1.53	1.26	55-0581	2.30	1.96	1.6
15K	55-0387	1.90	1.62	1.33	55-0583	2.40	2.04	1.6
20K	55-0388	1.90	1.62	1.33	....	....	....	...
25K	55-0389	2.05	1.74	1.44	55-0585	2.70	2.30	1.8
50K	....	....	....	....	55-0588	2.90	2.47	2.0

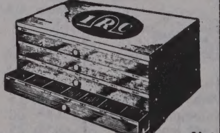
	100 WATT Size 6½" x 3/4"				225 WATT Size 10½" x 1-1/8"			
1	55-0956A	$3.60	$3.06	$2.52	55-1356A	$6.00	$5.10	$4.2
2	55-0956B	3.60	3.06	2.52	55-1356B	6.00	5.10	4.2
5	55-0956	2.80	2.38	1.96	55-1356	6.00	5.10	4.2
10	55-0957	2.80	2.38	1.96	55-1357	4.60	3.91	3.2
25	55-0958	2.80	2.38	1.96	55-1358	4.60	3.91	3.2
50	55-0959	2.80	2.38	1.96	55-1359	4.60	3.91	3.2
100	55-0960	2.80	2.38	1.96	55-1360	4.60	3.91	3.2
250	55-0960B	2.80	2.38	1.96	55-1360B	4.60	3.91	3.2
500	55-0961	2.80	2.38	1.96	55-1361	4.60	3.91	3.2
1K	55-0962	2.80	2.38	1.96	55-1362	4.60	3.91	3.2
1.5K	55-0962B	2.85	2.42	2.00	55-1362B	4.70	4.00	3.2
2.5K	55-0963	2.85	2.42	2.00	55-1363	4.70	4.00	3.2
5K	55-0964	2.85	2.42	2.00	55-1364	4.70	4.00	3.2
10K	55-0965	3.05	2.59	2.14	55-1365	4.95	4.21	3.4
100K	55-0973	4.35	3.70	3.05	....	....	....	..

IRC FIXED WIREWOUND TYPES

One type replaces ½-watt, 1 watt, or 2-watt resistors. Ambient temperature rating ½-watt at 137°C., 1-watt at 115°C., 2-watts at 70°C. Thermoplastic body .225" dia. x .562" long. Leads 1½" #18 AWG. Specify tolerance and resistance when ordering. § See Standard EIA Values Chart above.

Cat. No.	Tolerance	Resistance§ Values Available	Net 1-49	50-99	100-499	500-999
5-BWH	10%	0.1Ω to 9.1Ω	$.26	$.158	$.075	$.041
5-BWH	10%	10Ω to 1500Ω	.20	.119	.064	.033
5-BWH	10%	1600Ω to 2400Ω	.30	.178	.096	.05
5-BWH	5%	0.1Ω to 9.1Ω	.50	.302	.151	.08
5-BWH	5%	10Ω to 1500Ω	.32	.191	.096	.06
5-BWH	5%	1600Ω to 2400Ω	.46	.276	.138	.085

RESIST-O-KITS

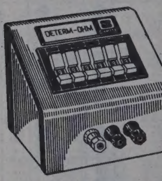


Resistor values have been carefully chosen and represent those most commonly used in servicing TV, radio and electronic equipment. Cabinet is sturdily made of sheet metal, measures 5-3/8" x 10-7/8" x 5-15/16".

		—Resistor Quantities—				
Cat. No.	Cabinet	½-W.	1-W.	2-W.	DCF	Net Each
5-#4A	A	150	––	––	––	$18.00
5-#5A	A	––	125	––	––	22.50
5-#6A	A	72	55	7	5	23.22
5-#3A	A	––	––	120	––	28.80

OHMITE DETERM-OHM

0.1% PRECISION RESISTANCE BOX

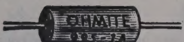


Simplified selection of resistance values by operation of rocker-type thumbwheel switches. Resistance setting indicated by direct in-line readout. Advance or subtract of numbers. Switch life in excess of 50,000 operations. Power rating .25 watt per resistor. Equipped with universal binding posts.

Cat. No.	Ohms Range	Ohms/ step'	Decades	Net Ea.
55-3405	0-0.999K	1	4	$85.00
55-3406	0-99.99K	10	4	85.00
55-3407	0-999.9K	100	4	90.00
55-3410	0-999.999K	1	6	125.00

Max. Current Ohms Range	M
1-9	710.
10-99	220.
100-999	71
1K-9,999	22
10K-99,999	
100K-999,000	

OHMITE RESISTORS



SERIES 99 AXIAL-LEAD RESISTORS

WIRE-WOUND. MOLDED VITREOUS ENAMEL INSULATION

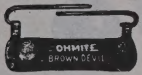
Wound on a ceramic core, with molded, uniform-thickness, high-temperature vitreous enamel insulation overall. Voltage breakdown 1000 v-ac. 1½" long axial wire leads. Power rating for free air, increases when mounted in fuse or other clip which acts as heat sink. Resistive tolerance ±5%. Sizes: 3¼W= .547" x .203" dia. 5W= .938" x .203" dia. 11W= 1.781" x .312" dia. See price table below.

Res. Ω	3¼ Watt Cat. No.	5-Watt Cat. No.	11 Watt Cat. No.
1.0	55-4330	55-4530	55-4730
1.2	....	55-4532	....
1.5	55-4334	55-4534	....
2.0	55-4337	55-4537	55-4737
2.7	55-4341	.....	....
3.0	55-4342	55-4542	55-4742
4.0	55-4346	55-4546	55-4746
5.0	55-4349	55-4549	55-4749
5.6	......	55-4551	....
6.8	55-4354	......	....
7.5	55-4356	......	55-4756
10	55-4361	55-4561	55-4761
12	....	55-4563	....
15	55-4365	55-4565	55-4765
18	55-4367	55-4567	....
20	55-4368	55-4568	55-4768
22	55-4369	55-4569	55-4769
25	55-4371	55-4571	55-4771
30	55-4373	55-4573	55-4773
33	55-4374	......	55-4774
39	55-4376	55-4576	55-4776
40	55-4377	55-4577	55-4777
47	55-4379	55-4579	....
50	55-4380	55-4580	55-4780
51	....	55-4581	....
56	55-4382	55-4582	....
68	55-4385	55-4585	55-4785
75	55-4387	55-4587	55-4787
82	55-4389	55-4589	55-4789
100	55-4392	55-4592	55-4792
120	55-4394	55-4594	....
150	55-4396	55-4596	55-4796
160	....	55-4597	....
200	55-4399	55-4599	55-4799
220	55-4400	55-4600	55-4800
250	55-4402	55-4602	55-4802
270	55-4403	55-4603	....
300	55-4404	55-4604	55-4804
330	55-4405	55-4605	....
350	....	55-4605A	55-4805A
390	55-4407	55-4607	....
400	55-4408	55-4608	....
450	55-4409A	....	....
470	55-4410	55-4610	55-4810
500	55-4411	55-4611	55-4811
510	....	55-4612	....
560	55-4413	55-4613	....
600	55-4414	55-4614	....
620	55-4415	....	....
680	55-4416	....	....
700	55-4417	....	....
750	55-4418	55-4618	55-4818
800	55-4419	55-4619	....
900	55-4421	....	....
1K	55-4423	55-4623	55-4823
1.1K	55-4424	....	....
1.2K	55-4425	55-4563	....
1.3K	55-4426	....	....
1.5K	55-4427	55-4627	55-4827
1.8K	55-4429	55-4629	....
2K	55-4430	55-4630	55-4830
2.2K	55-4431	55-4631	....
2.5K	55-4433	55-4633	55-4833
2.7K	55-4434	55-4634	55-4834
3.0K	55-4435	55-4635	55-4835
3.3K	55-4436	55-4636	....
3.9K	....	55-4638	....
4.0K	55-4439	55-4639	55-4839
4.7K	55-4441	55-4641	....
5.0K	55-4442	55-4642	55-4842
5.6K	....	55-4644	....
6.0K	....	55-4645	55-4845
6.8K	....	55-4647	55-4847
7.0K	55-4448	....	....
7.5K	55-4449	55-4649	....
8.0K	....	55-4650	....
8.2K	55-4451	55-4651	....
9.0K	....	55-4652	....
9.1K	....	55-4653	....
10K	55-4454	55-4654	55-4854
12K	....	55-4656	....
15K	....	55-4658	55-4858
20K	....	55-4661	....
22K	....	55-4662	....
25K	....	55-4664	55-4864
40K	....	....	55-4870
50K	....	....	55-4873
51K	....	....	55-4874

SERIES 99 PRICES

Cat. No.	Net 1-9	10-24	25-99
4330 thru 4423	$0.68	$0.58	$0.48
4424 thru 4442	.74	.63	.52
4443 thru 4454	.76	.65	.53
4530 thru 4623	.74	.63	.52
4624 thru 4642	.76	.65	.53
4643 thru 4654	.84	.71	.59
4655 thru 4661	.92	.78	.64
4662 thru 4664	1.05	.89	.74
4730 thru 4823	.79	.67	.55
4824 thru 4842	.89	.76	.62
4843 thru 4854	1.00	.85	.70
4855A thru 4861	1.10	.94	.77
4862 thru 4870	1.15	.98	.81
4871 thru 4874	1.30	1.11	.91

VALUES NOT LISTED MAY BE AVAILABLE ON SPECIAL ORDER



"BROWN DEVIL" WIRE-WOUND RESISTORS

VITREOUS ENAMEL PROTECTED

"Brown Devil" vitreous enameled, wire-wound resistors have for years been a by-word for ruggedness and durability in low power resistors. They are wound with high grade resistance wire on sturdy ceramic cores. The terminals are narrow, welded bands of special alloy to which 1½" long, tinned-wire leads are attached. Windings are covered with a vitreous enamel which protects and anchors the turns. Power ratings are for use in free air. Resistance tolerance ±5% above 1.0 ohm, ±10% below 1 ohm. Wire leads 5¼ watt 20 ga., others 18 ga. Sizes: 5¼W= 5/8" x ¼" dia. 12W= 1-3/4" x 5/16" dia. 20W= 2" x 7/16" dia. ★Include complete Cat. No. when ordering.

	5¼ WATT			12 WATT			2 0 WATT		
Res. Ω	Cat. 55-★	Net 1-9	10-24	Cat. 55-★	Net 1-9	10-24	Cat. 55-★	Net 1-9	10-24
0.5	....	....	....	1700A	$1.05	$0.89	1800A	$1.20	$0.94
1.0	2822	$0.66	$0.56	1701	.74	.63	1802A	.87	.74
1.5	....	....	....	1704	.74	.63	....	....	....
2.0	2829	.66	.56	1705	.74	.63	1802B	.87	.74
3.0	2833	.66	.56	1706	.74	.63	1802C	.87	.74
4.0	....	....	....	1707	.74	.63	....	....	....
5.0	....	....	....	1708	.74	.63	1803	.87	.74
5.1	2839	.66	.56	....	....	....	....	....	....
7.5	....	....	....	1709	.74	.63	....	....	....
10	2846	.66	.56	1710	.74	.63	1804	.87	.74
15	2850	.66	.56	1712	.74	.63	....	....	....
20	2853	.66	.56	1713	.74	.63	....	....	....
25	....	....	....	1714	.74	.63	1805	.87	.74
30	....	....	....	1715	.74	.63	....	....	....
40	....	....	....	1717	.74	.63	....	....	....
50	....	....	....	1718	.74	.63	1806	.87	.74
75	....	....	....	1719	.74	.63	1807	.87	.74
100	2870	.66	.56	1720	.74	.63	1808	.87	.74
125	....	....	....	1721	.74	.63	....	....	....
150	2874	.66	.56	1722	.74	.63	1809	.87	.74
180	2876	.66	.56	....	....	....	....	....	....
200	2877	.66	.56	1723	.74	.63	1810	.87	.74
250	....	....	....	1725	.74	.63	1811	.87	.74
300	2881	.66	.56	1726	.74	.63	1812	.87	.74
400	....	....	....	1728	.74	.63	....	....	....
470	2886	.66	.56	....	....	....	....	....	....
500	....	....	....	1730	.74	.63	1815	.87	.74
600	....	....	....	1731	.74	.63	....	....	....
650	....	....	....	....	....	....	1816	.87	.74
700	....	....	....	1732	.74	.63	1817	.87	.74
750	....	....	....	1733	$0.74	$0.63	1818	$0.87	$0.74
820	2892	$0.66	$0.56	....	....	....	....	....	....
900	....	....	....	1735	.74	.63	1820A	.87	.74
1K	2894	.66	.56	1736	.74	.63	1821	.87	.74
1.2K	....	....	....	1738	.79	.67	1822	.89	.76
1.5K	2898	.74	.63	1740	.79	.67	1824	.89	.76
1.75K	....	....	....	1741	.79	.67	1825	.89	.76
2K	2901	.74	.63	1742	.79	.67	1827	.89	.76
2.25K	....	....	....	1743	.79	.67	....	....	....
2.5K	....	....	....	1744	.79	.67	1830	.89	.76
3K	2905	.74	.63	1745	.79	.67	1832	.89	.76
3.5K	....	....	....	1746	.79	.67	1833	.89	.76
4K	....	....	....	1747	.79	.67	1834	.89	.76
4.5K	....	....	....	1748	.79	.67	....	....	....
5K	....	....	....	1749	.79	.67	1836	.89	.76
6K	....	....	....	1750	.89	.76	1837	1.10	.94
7.5K	....	....	....	1752	.89	.76	....	....	....
8K	....	....	....	1753	.89	.76	....	....	....
10K	2918	.76	.65	1755	.89	.76	1841	1.10	.94
15K	....	....	....	1761	1.05	.89	....	....	....
20K	2925	.84	.71	1765	1.05	.89	1844	1.15	.98
25K	....	....	....	1767	1.10	.94	1845	1.25	1.06
30K	....	....	....	1768	1.10	.94	....	....	....
35K	....	....	....	1769	1.10	.94	....	....	....
40K	....	....	....	1770	1.10	.94	1848	1.25	1.06
50K	....	....	....	1772	1.20	1.02	1850	1.45	1.23
100K	....	....	....	....	....	....	1860	2.00	1.70

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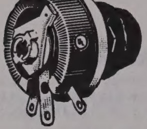


OHMITE POWER RHEOSTATS

WIRE-WOUND VITREOUS ENAMELED

For permanently smooth, close control of AC or DC power. Resistance wire is wound on a solid ceramic core and turns locked in place with vitreous enamel. Pivoted, universal action mounting of the contact brush assure perfect contact. Copper-graphite brushed (silver-graphite on high current models) prevents wear on the resistance track. Ratings are for use in free air. Enclosed units must be de-rated. *Mounted on metal panel.

MODEL "E"–12.5 WATT*

Dia. 7/8". Depth 11/16", Shaft 1/8", Rotation 300°. ¼"-32 bushing. Wt. 0.52 oz. each. Less Type 5151 knob. †Silicon ceramic coating.

Cat.	Ω	Amps	Cat.	Ω	Amps
55-0101	1	3.53	**55-0115**	250	.22
55-0104	6	1.44	**55-0116**	350	.19
55-0106	10	1.12	**55-0117**	500	.15
55-0108	25	.71	**55-0119**	1K	.11
55-0110	50	.50	**55-0121**	2.5K	.071
55-0112	100	.35	**55-0123†**	5K	.050
			55-4191†	10K	.035*

Stock Sizes	Net 1-4	5-9	10-24	25-49
1 thru 10	$6.30	$5.36	$4.22	$3.47
25 thru 500	5.50	4.68	3.69	3.03
1K thru 2.5K	6.30	5.36	4.22	3.47
5K	7.60	6.46	5.09	4.18
10K	7.90	6.72	5.29	4.35

MODEL "H"–25 WATT

Dia. 1-9/16", Depth 1-3/8", Shaft ¼", Rotation 300°. 3/8"-32 bushing. Wt. 0.19 lbs. Less type 5150 knob.

Cat.	Ω	Amps	Cat.	Ω	Amps
55-0140	1	5.00	**55-0154**	250	.316
55-0141	2	3.54	**55-0155**	350	.267
55-0143	6	2.04	**55-0156**	500	.222
55-0144	8	1.77	**55-0157**	750	.286
55-0145	10	1.58	**55-0158**	1K	.155
55-0146	15	1.29	**55-0159**	1.5K	.129
55-0147	25	1.00	**55-0160**	2.5K	.100
55-0149	50	.707	**55-0161**	3.5K	.084
55-0150	75	.575	**55-0162**	5.0K	.070
55-0151	100	.500	**55-4201†**	10K	.050
55-0152	125	.445	**55-4203†**	20K	.035
55-0153	175	.375	**55-4204†**	25K	.032

Stock Sizes	Net 1-4	5-9	10-24	25-49
1 thru 10	$6.30	$5.36	$4.22	$3.47
15 thru 750	5.50	4.68	3.69	3.03
1K thru 2.5K	6.30	5.36	4.22	3.47
3.5K thru 5K	7.10	6.04	4.76	3.91
10K	7.40	6.29	4.96	4.07
20K	8.40	7.14	5.63	4.62
25K	9.20	7.82	6.16	5.06

MODEL "J"–50 WATT

Dia. 2-5/16", Depth 1-3/8", Shaft ¼". Rotation 300°. 3/8"-32 bushing. Wt. 0.32 lbs. Less Type 5150 knob. †Silicon ceramic coating.

Cat.	Ω	Amps	Cat.	Ω	Amps
55-0309	1	7.07	**55-0321**	150	.575
55-0310	2	5.00	**55-0322**	225	.470
55-0311	4	3.53	**55-0323**	300	.408
55-0312	6	2.88	**55-0324**	500	.316
55-0313	8	2.50	**55-0325**	800	.250
55-0314	12	2.04	**55-0326**	1K	.224
55-0315	16	1.76	**55-0327**	1.6K	.176
55-0316	22	1.50	**55-0328**	2.5K	.141
55-0317	35	1.19	**55-0329**	3.5K	.119
55-0318	50	1.00	**55-0330**	5K	.100
55-0319	80	.79	**55-0332**	10K	.070
55-0320	125	.63	**55-4215†**	50K	.032

Stock Sizes	Net 1-4	5-9	10-24	25-49
1 thru 6	$7.40	$6.29	$4.96	$4.07
8 thru 500	6.60	5.61	4.42	3.63
800 thru 2.5K	7.00	5.95	4.69	3.85
3.5K thru 10K	7.40	6.29	4.96	4.07
50K	14.70	12.50	9.85	8.09

MODEL "K"–100 WATTS

Dia. 3-1/8". Depth 1-3/4", Shaft ¼", Rotation 300°. 3/8"-32 bushing. Wt. 0.64 lbs. Less Type 5150 knob.

Cat.	Ω	Amps	Cat.	Ω	Amps
55-0440	.5	14.1	**55-0449**	50	1.41
55-0441	1	10.0	**55-0450**	75	1.15
55-0444	5	4.47	**55-0451**	100	1.00
55-0445	7.5	3.65	**55-0452**	200	.707
55-0446	10	3.16	**55-0453**	300	.575
55-0447	16	2.50	**55-0455**	500	.447
55-0448	25	2.00	**55-0457**	1K	.316

Stock Sizes	Net 1-4	5-9	10-24	25-49
.5 thru 10	$10.60	$9.01	$7.10	$5.83
16 thru 500	9.70	8.25	6.50	5.34
1K	10.60	9.01	7.10	5.83

MODEL "P"–225 WATTS

Dia. 5". Depth 2-1/8", Shaft 3/8", Rotation 310°. Mtg. 2 #¼"-20 x 1½" F.H. screws on 1-3/4" ctrs. Less 5105 knob.

Cat.	Ω	Amps	Cat.	Ω	Amp
55-1252	3	8.66	**55-1263**	200	1.05
55-1256	10	4.74			

Stock Sizes	Net 1-2	3 Up
3 thru 200	$20.75	$17.64

MODEL "N"–300 WATTS

Dia. 6", Depth 2-3/8". Shaft 3/8", Rotation 315°. Mtg. 2 #¼"-20 x 1½" F.H screws on 2-3/8" ctrs. Wt. 2.6 lbs.

Cat.	Ω	Amps	Cat.	Ω	Amp
55-0650	1	17.32	**55-0661**	100	1.73
55-0656	10	5.48	**55-0659**	50	2.45
55-0657	15	4.47	**55-0660**	75	2.00
55-0658	25	3.46	**55-0665**	400	.86

Stock Sizes	Net 1-2	3 Up
1 thru 400	$23.25	$19.76

QUANTITY PRICE NOTE

Ohmite Rheostats, Switches, Resistors etc. may not be assorted for quantity prices, must be all one type and catalog number

RHEOSTAT DIAL & KNOB

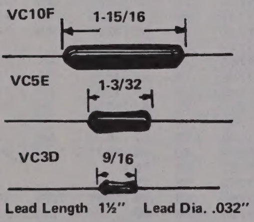
5000

5150

Handsomely finished dial & knob for Ohmite rheostat and other apparatus, feature bright figures on black background. *For ¼" shaft.

Cat. 55-5000	For H,J,G,K,L	**Ea. $.33**
Cat. 55-5150	1½" dia. knob*	**Ea. $.33**

CLAROSTAT VITREOUS RESISTORS



SERIES VC AXIAL LEAD RESISTORS

STANDARD TOLERANCE ±5%

These are particularly adapted to printed circuit, terminal board, and point-to-point wiring applications. Available in 3, 5 and 10 Watts.

STOCK AVAILABILITY RESISTANCE VALUES IN OHMS

1	12	33	75	220	400	750	1.5K	3.3K	6K	10K	18K	35K
1.5	15	35	82	225	450	800	1.75K	3.5K	6.8K	11K	20K	39K
2	18	39	100	250	470	820	1.8K	3.9K	7K	12K	22K	40K
3	20	40	120	270	500	900	2K	4K	7.5K	12.5K	22.5K	45K
4	22	47	125	300	560	1K	2.2K	4.5K	8K	13.5K	25K	47K
5	25	50	150	330	600	1.1K	2.25K	4.7K	8.2K	15K	27K	50K
7.5	27	56	180	350	680	1.2K	2.7K	5K	8.5K	16K	30K	
10	30	68	200	390	700	1.25K	3K	5.6K	9K	17.5K	33K	

3 WATT SERIES VC 3D

Cat. No.	Range Ohms	Net 1-9	10-24	25-99
21-VC3D-(*)	1.0-100	$.54	$.46	$.37
21-VC3D-(*)	101-2.5K	.49	.43	.34
21-VC3D-(*)	2501-5.5K	.56	.48	.39
21-VC3D-(*)	5501-7.5K	.60	.52	.41
21-VC3D-(*)	7501-10K	.70	.61	.49

* Insert resistance value from table above.

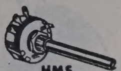
5 WATT SERIES VC 5E

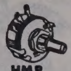
Cat. No.	Range Ohms	Net 1-9	10-24	25-99
21-VC5E-(*)	1.0-1K	$.54	$.46	$.37
21-VC5E-(*)	1001-5K	.56	.48	.39
21-VC5E-(*)	5001-10K	.60	.52	.41
21-VC5E-(*)	10001-15K	.69	.56	.44
21-VC5E-(*)	15001-20K	.73	.63	.50
21-VC5E-(*)	20001-25K	.96	.83	.66

10 WATT SERIES BC10F

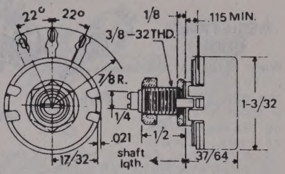
Cat. No.	Range Ohms	Net 1-9	10-24	25-99
21-VC10F-(*)	1.0-1K	$.58	$.50	$.40
21-VC10F-(*)	1001-5K	.64	.56	.44
21-VC10F-(*)	5001-10K	.70	.61	.49
21-VC10F-(*)	10001-20K	.80	.69	.56
21-VC10F-(*)	20001-40K	.90	.79	.63
21-VC10F-(*)	40001-50K	1.06	.92	.74

CENTRALAB POTENTIOMETERS





HOT MOLDED 2 WATT POTS FOR INDUSTRIAL AND MILITARY USE



For commercial, industrial and military electronic applications where dependable service and high quality are prime requisites. Units meet the requirements of military specifications MIL-R-94B. Applicable MIL Designations are shown in the table below. Overall dimensions are illustrated to the right. Available with 2½" and 7/8" slotted shaft with standard 3/8" bushing or 5/8" slotted shaft with ½" locking bushing. SPECIFICATIONS: Tolerance from 50 through 500K ohms, inclusive, ±20%. Above 500K ohms, through 5 megohms ±10%. Linear taper. Effective electrical rotation 312° ±3%. Wattage rating 2.25 watts at 70C., 500 volts. Dielectric strength 900 VAC to ground. Solder lug terminals. Lead-tin plated for ease of soldering. Locating lug. Resistance element made of special carbon composition hot molded with mineral-filled phenolic base. Load Life: less than 10% change after 1,000 hours at +70C. Vibration less than 1.5% change when tested per MIL-R-94B. Method Paragraph 4.6.9 Freedom from contamination from dirt, carbon particles and sealing compounds is a benefit of the elevated resistance track construction. Exceptionally long, noise-free operation that actually improves with use. *Add resistance desired from table below.

—HMS 2½" SLOTTED SHAFT—

Cat. No.	Net 1-9	10-24	25-49	50-99	100-249
165-HMS-*	$1.90	$1.55	$1.45	$1.25	$.92

—HMP 7/8" SLOTTED SHAFT—

Cat. No.	Net 1-9	10-24	25-49	50-99	100-249
165-HMP-*	$1.85	$1.45	$1.35	$1.20	$.92

—HML 5/8" SLOTTED SHAFT—

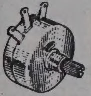
Cat. No.	Net 1-9	10-24	25-49	50-99	100-249
165-HML-*	$2.10	$1.80	$1.50	$1.30	$.99

*AVAILABLE RESISTANCE VALUES TABLE & MIL DESIGNATIONS

	MIL DESIGNATIONS		
Ohms	TYPE HMS RV4 NAYSK-	TYPE HMP RV4 NAYSD-	TYPE HML RV4 LAYSA-
50	500A	500A	500A
100	101A	101A	101A
150	151A	151A	151A
250	251A	251A	251A
350	351A	351A	351A
500	501A	501A	501A
750	751A	751A	751A
1000	102A	102A	102A
1500	152A	152A	152A
2500	252A	252A	252A
3500	352A	352A	352A
5000	502A	502A	502A
7500	752A	752A	752A
10K	103A	103A	103A
15K	153A	153A	153A
25K	253A	253A	253A
35K	353A	353A	353A
50K	503A	503A	503A
75K	753A	753A	753A
100K	104A	104A	104A
150K	154A	154A	154A
250K	254A	254A	254A
350K	354A	354A	354A
500K	504A	504A	504A
750K	754B	754B	754B
1 Meg	105B	105B	105B
1.5 Meg	155B	155B	155B
2 Meg	205B	205B	205B
2.5 Meg	255B	255B	255B
3.5 Meg	355B	355B	355B
5 Meg	505B	505B	505B

MALLORY CONTROLS

4-WATT POTS



Linear taper. Total rotation 294°, effective electrical rotation 275°. Voltage breakdown 1000 v-dc. Size: 5/8" x 1-5/8" dia. Shaft ¼" x 5/16". Bushing 3/8"-32.

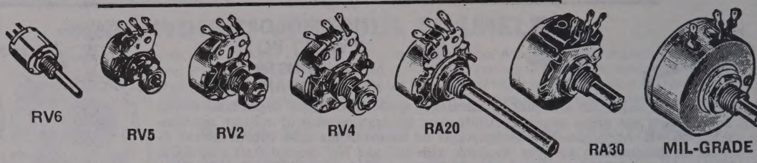
Cat. No.	Ohms Res.	Amps Cur.	Net 1-9	10-49
47-M1PK	1	2.00	$1.46	$1.41
47-M3PK	3	1.15		
47-M6PK	6	.82		
47-M10PK	10	.63		
47-M15PK	15	.52		
47-M20PK	20	.45		
47-M25PK	25	.40		
47-M50PK	50	.28		
47-M75PK	75	.23		
47-M100PK	100	.20		
47-M200PK	200	.14		
47-M400PK	400	.10		
47-M500PK	500	.09		
47-M600PK	600	.082		
47-M1MPK	1K	.063		
47-M1.5MPK	1.5K	.052		
47-M2MPK	2K	.045		
47-M2.5MPK	2.5K	.04		
47-M3MPK	3K	.037		
47-M5MPK	5K	.028		
47-M10MPK	10K	.02		
47-M15MPK	15K	.016	$2.56	$1.59
47-M20MPK	20K	.014	2.56	1.59
47-M25MPK	25K	.013	2.56	1.59
47-M50MPK	50K	.009	3.15	1.88
47-M75MPK	75K	.0073	4.45	2.66
47-M100MPK	100K	.0063	4.45	2.66

MINIATURE TRIMMER CONTROLS

Miniature ¼-watt trimmers designed especially for printed circuitry. Can be used in transistorized or tube circuits, wherever an occasionally adjusted variable resistance is needed. Has flush, open, crossed slot. Adjustments can be made with blade or Phillips type screwdriver. All are linear taper; 270° rotation; 500 V maximum rating. Vertical mount types are .592" dia. x .179" depth. Horizontal types are .532" dia. x .179" depth. Wt. 3 oz.

Vertical Mtg. Cat. No.	Horizontal Mtg. Cat. No.	Ohms Res.	Net 1-24	25-49	50-99	100-174
47-MTC12L1	**47-MTC12L4**	100	$.39	$.35	$.33	$.29
47-MTC22L1	**47-MTC22L4**	200				
47-MTC251L1	**47-MTC251L4**	250				
47-MTC32L1	**47-MTC32L4**	300				
47-MTC52L1	**47-MTC52L4**	500				
47-MTC751L1	**47-MTC751L4**	750				
47-MTC13L1	**47-MTC13L4**	1000				
47-MTC152L1	**47-MTC152L4**	1500				
47-MTC23L1	**47-MTC23L4**	2000				
47-MTC252L1	**47-MTC252L4**	2500				
47-MTC33L1	**47-MTC33L4**	3000				
47-MTC53L1	**47-MTC53L4**	5000				
47-MTC63L1	**47-MTC63L4**	6000				
47-MTC682L1	**47-MTC682L4**	6800				
47-MTC14L1	**47-MTC14L4**	10K	$.39	$.35	$.33	$.29
47-MTC153L1	**47-MTC153L4**	15K				
47-MTC24L1	**47-MTC24L4**	20K				
47-MTC253L1	**47-MTC253L4**	25K				
47-MTC54L1	**47-MTC54L4**	50K				
47-MTC15L1	**47-MTC15L4**	100K				
47-MTC124L1	**47-MTC124L4**	120K				
47-MTC184L1	**47-MTC184L4**	180K				
47-MTC254L1	**47-MTC254L4**	250K				
47-MTC3253L1	**47-MTC3253L4**	325K				
47-MTC454L1	**47-MTC454L4**	450K				
47-MTC55L1	**47-MTC55L4**	500K				
47-MTC16L1	**47-MTC16L4**	1 meg.	$.39	$.35	$.33	$.29
47-MTC26L1	**47-MTC26L4**	2 meg.				
47-MTC355L1	**47-MTC355L4**	3.5 meg.				

CTS POTENTIOMETERS



RESISTANCE CODE*

When ordering the potentiometers on this page, resistance is specified by adding the suffix to the catalog number which appears in the table below for that particular value. For example, to order the ½ watt type 65 @ 500 ohms, the part number 360-RV5NAYSD501A. All values up to 1 meg. are supplied with a tolerance of ± 10%, (1 meg. and above 20%). All values are line taper. LT types have locking bushing.

Ω	Suf.	Ω	Suf.	Ω	Suf.	Ω	Suf.
3	**3ROA**	100	**101A**	7500	**752A**	350K	**354A**
6	**6ROA**	150	**151A**	10K	**103A**	500K	**504A**
8	**8ROA**	200	**201A**	15K	**153A**	750K	**754A**
10	**100A**	250	**251A**	25K	**253A**	1 Meg	**105B**
15	**150A**	350	**351A**	35K	**353A**	2 Meg	**205B**
20	**200A**	500	**501A**	50K	**503A**	2.5 Meg	**255B**
25	**250A**	750	**751A**	75K	**753A**	5.0 Meg	**505B**
35	**350A**	1000	**102A**	100K	**104A**	....	
50	**500A**	2500	**252A**	150K	**154A**	....	
75	**750A**	5000	**502A**	250K	**254A**	....	

MILITARY COMPOSITION VARIABLE RESISTORS CERTIFIED TO MIL-R-94C

½ WATT STYLE RV5

¾" DIA. MINIATURE COMPOSITION

Small size. Designed for high temperature and humidity applications. Choice of 2 shaft styles, plain or locking bushings. Shaft dia. is 1/8". †Except 350, 750, 7500, 15K, 35K, 75K, 150K, 350K, 750K, 2 meg.

Cat. No.	Type	Available Resistance†	Shaft Lgth.	Bushing Lgth.	Net 1-9	10-24
360-RV5NAYSD*	65	250-2.5 meg.	7/8"	3/8"	**$3.25**	**$3.00**
360-RV5LAYSB*	65LT	250-2.5 meg.	1/2"	3/8"	**3.25**	**3.00**

¾ WATT STYLE RV6

½" DIA. MINIATURE COMPOSITION

Miniature size. Excellent stability. Reliable carbon-ceramic element. High resolution. Choice of 2 shaft styles, plain or locking bushings. †Except 150, 200, 350, 750, 7500, 35K, 75K, 350K, 570K.

Cat. No.	Type	Available Resistance†	Shaft Lgth.	Bushing Lgth.	Net 1-9	10-24
360-RV6NAYSD*	300	100-2.5 meg.	7/8"	1/4"	**$4.10**	**$3.65**
360-RV6LAYSA*	300LT	100-2.5 meg.	5/8"	1/2"	**4.10**	**3.70**

1 WATT STYLE RV2

15/16" DIA. COMPOSITION

Operational up to 150°C. Designed for high temperature and humidity, military applications. Choice of 2 shaft styles, plain or locking bushings, ¼" dia. shafts. †Except 150, 200, 350, 750, 7500, 15K, 35K, 75K, 150K, 350K, 750K, 2.0 meg.

Cat. No.	Type	Available Resistance†	Shaft Lgth.	Bushing Lgth.	Net 1-9	10-24
360-RV2NAYSD*	90	100-2.5 meg.	7/8"	3/8"	**$3.25**	**$3.00**
360-RV2LAYSA*	90LT	100-2.5 meg.	5/8"	1/2"	**3.25**	**3.00**

MILITARY WIRE WOUND VARIABLE RESISTORS CERTIFIED TO MIL-R-19B

2 WATT STYLE RA20

1-17/64" DIA. WIREWOUND

Compact size. Insulated housing. ¼" dia. shafts. Choice of 2 sha styles, plain or locking bushings. †Except 10, 75, 200.

Cat. No.	Type	Available Resistance	Shaft Lgth.	Bushing Lgth.	Net 1-9	1 2
360-RA20NASD*	252	3-15K	7/8"	3/8"	**$2.55**	**$2.0**
360-RA20LASB*	252LT	3-15K	5/8"	1/2"	**2.55**	**2.0**
360-RA20LASD*	252LT	3-15K†	7/8"	1/2"	**2.55**	**2.0**

4 WATT STYLE RA30

1-17/32" DIA. WIREWOUND

Reliable CTS wirewound element. ¼" dia. shafts. Choice of 2 sha styles, plain or locking bushings.

Cat. No.	Type	Available Resistance	Shaft Lgth.	Bushing Lgth.	Net 1-9	1 2
360-RA30NASD*	25	3-25K	7/8"	3/8"	**$2.70**	**$2.1**
360-RA30LASB*	25LT	3-25K	5/8"	1/2"	**2.70**	**2.2**

MALLORY CONTROLS

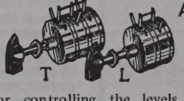
MALLORY TYPE "VW"

5-WATT SUBMINIATURE WIRE-WOUND CONTROL

¾" diameter. Mech. Rotation: 305° Elec. Rotation: 275°. Resis. Tolerance: ± 10%. Voltage Breakdown: 900 VAC rms. Bushing: 3/8"–32 x 3/8". Shaft ¼" dia. x 2½" FMS. Furnished with nut and lug.

Cat.	Ohms	Net	Cat.	Ohms	Net
47-VW1	1	**$1.49**	**47-VW300**	300	**$1.38**
47-VW2	2	**1.49**	**47-VW400**	400	**1.49**
47-VW3	3	**1.49**	**47-VW500**	500	**1.49**
47-VW5	5	**1.49**	**47-VW600**	600	**1.49**
47-VW6	6	**1.49**	**47-VW750**	750	**1.49**
47-VW8	8	**1.49**	**47-VW1K**	1K	**1.49**
47-VW10	10	**1.49**	**47-VW1P5K**	1.5K	**1.56**
47-VW15	15	**1.49**	**47-VW2K**	2K	**1.56**
47-VW20	20	**1.49**	**47-VW2P5K**	2.5K	**1.56**
47-VW25	25	**1.49**	**47-VW3K**	3K	**1.56**
47-VW30	30	**1.49**	**47-VW4K**	4K	**1.56**
47-VW40	40	**1.49**	**47-VW5K**	5K	**1.56**
47-VW50	50	**1.49**	**47-VW7P5K**	7.5K	**1.62**
47-VW60	60	**1.49**	**47-VW10K**	10K	**1.62**
47-VW75	75	**1.49**	**47-VW15K**	15K	**1.68**
47-VW100	100	**1.49**	**47-VW20K**	20K	**1.68**
47-VW200	200	**1.49**	**47-VW25K**	25K	**1.78**
47-VW250	250	**1.49**			

MALLORY AUDIO ATTENUATORS



For controlling the levels of audio circuits. Normal power dissipation 4 watts, peak 15 watts. Base diameter 1-5/8". Bushing 3/8"-32 x 3/8". Shaft ¼" dia. x 2" long. Furnished with knob, nut, washer and dial plate.

Ohms	"T" Pads Cat. No.	"L" Pad Cat. N
2	**47-T2**	**47-L2**
4	**47-T4**	**47-L4**
6	**47-T6**	**47-L6**
8	**47-T8**	**47-L8**
15	**47-T15**	**47-L15**
50	**47-T50**	**47-L50**
100	**47-T100**	**47-L100**
200	**47-T200**	**47-L200**
250	**47-T250**	**47-L250**
500	**47-T500**	**47-L500**
600	**47-T600**	**47-L600**
1K	**47-T1000**	**47-L100**
2K	**47-T2000**	**47-L200**
3K	**47-T3000**	**47-L300**
4K	....	**47-L400**
	Each $3.82	**Each $2.95**

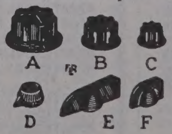
DUAL TANDEM STEREO CONTROL

Dual 59 ohms impedance. Case 1-9/32" dia. Bushing 3/8"-32 x 1". Shaft ¼" dia. x ½" long.

Cat. 47-RR-50 **Net $3.80**

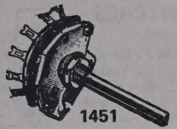
MALLORY INSTRUMENT KNOBS

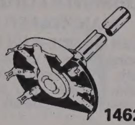
Molded of black phenolic. *For 1/8" shaft. Others for 1/4".



Cat. No.	See Fig.	Knob Dia.	Ne Ea
47-367-1	A	1½"	**$0.3**
47-368-1	B	1"	**.3**
47-1910K*	C	¾"	**.3**
47-364	D	11/16"	**.1**
47-365-1	E	2¼"	**.3**
47-366-1	F	1¼"	**.1**

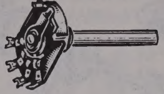
CENTRALAB SWITCHES

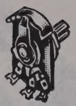




GENERAL PURPOSE

ROTARY ACTION





For use in phono-radio, intercom, simple band-switching, BFO and similar circuit applications. High-grade phenolic insulation. Voltage breakdown 1000 v-rms to ground. Metal parts, except clips and contacts, are cadmium plated steel. Single hole mounting. Bushing 3/8"-32 thread 3/8" long. Current rating: 2.75 amps at 15 v-dc; 230 MA at 115 v-ac. Solder lug terminals. ¼" diameter shafts.

SPRING RETURN

For "press-to-talk" intercom or other momentary contact applications. Non-shorting contacts. Maximum mounting depth 1". ¼" round shaft, 2¼" long FMS.

*Positive indexing one side. †Heavy duty.

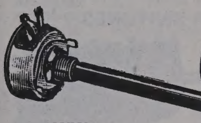
Cat. 165-1463	1 pole, 2 positions	**Net $1.25**
Cat. 165-1464	2 pole, 2 positions	**Net 1.25**
Cat. 165-1451	4 pole, 2 positions†	**Net 2.77**
Cat. 165-1488	6 pole, 3 positions	**Net 4.16**
Cat. 165-1489	6 pole, 3 positions*	**Net 4.16**

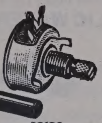
Switches below are positive indexing. **Remote speaker switch, for separate or simultaneous operation. Type 1484 furnished with 15/16" split knurl, black knob.

Cat.	Contacts	Shaft	Net
165-1460	SP-DT shorting	¼" x 2¼" FMS rd.	$1.25
165-1461	SP-3T shorting	¼" x 2¼" FMS rd.	1.25
165-1465	Same as 1461 with DP-ST AC switch		2.09
165-1462	DP-2T shorting	¼" x 2¼" FMS rd.	1.25
165-1472	DP-3T non-short	¼" x 2¼" FMS rd.	1.25
165-1473	DP-3T shorting	¼" x 2¼" FMS rd.	1.25
165-1483**	SP-3T shorting	¼" x 2¼" FMS rd.	.88
165-1484**	SP-3T shorting	¼" x 5/8" FMS.	1.03

TYPE WW & WN WIREWOUND

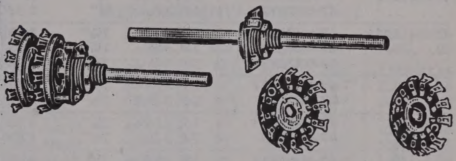
5-WATT CONTROLS





Only 1-5/32" dia. x 9/16" deep. 900 v-ac rms breakdown to ground. Mounting bushing threaded 3/8"-32 x 3/8" for single hole mounting. Model WW has ¼" round x 3" long aluminum shaft. Model WN has ¼" x ¾" long fingertip knurled and screwdriver slotted shaft. Linear taper. Tolerance: ±10%.

Model WW Cat.	Net	Ohms	Model WN Cat.	Net
165-WW-010		1	165-WN-010	
165-WW-020	Each	2	165-WN-020	Each
165-WW-030	$1.32	3	165-WN-030	$1.32
165-WW-040		4	165-WN-040	
165-WW-050		5	165-WN-050	
165-WW-060		6	165-WN-060	
165-WW-080	Each	8	165-WN-080	Each
165-WW-100	$1.32	10	165-WN-100	$1.32
165-WW-150		15	165-WN-150	
165-WW-200		20	165-WN-200	
165-WW-250		25	165-WN-250	
165-WW-300		30	165-WN-300	
165-WW-400	Each	40	165-WN-400	Each
165-WW-500	$1.32	50	165-WN-500	$1.32
165-WW-600		60	165-WN-600	
165-WW-750		75	165-WN-750	
165-WW-101		100	165-WN-101	
165-WW-201	Each	200	165-WN-201	Each
165-WW-251	$1.32	250	165-WN-251	$1.32
165-WW-301		300	165-WN-301	
165-WW-401		400	165-WN-401	
165-WW-501		500	165-WN-501	
165-WW-751		750	165-WN-751	
165-WW-102	Each	1000	165-WN-102	Each
165-WW-152	$1.32	1500	165-WN-152	$1.32
165-WW-202		2000	165-WN-202	
165-WW-252		2500	165-WN-252	
165-WW-302		3000	165-WN-302	
165-WW-402	Each	4000	165-WN-402	Each
165-WW-502	$1.32	5000	165-WN-502	$1.32
165-WW-752		7500	165-WN-752	
165-WW-103		10K	165-WN-103	
165-WW-153		15K	165-WN-153	
165-WW-203	Each	20K	165-WN-203	Each
165-WW-253	$1.59	25K	165-WN-253	$1.59
165-WW-303		30K	165-WN-303	
165-WW-403	Each	40K	165-WN-403	Each
165-WW-503	$2.01	50K	165-WN-503	$2.01
165-WW-753	Each	75K	165-WN-753	Each
165-WW-104	$2.46	100K	165-WN-104	$2.46



MINIATURE ROTARY SWITCHES

MILITARY STYLE SR03 PER MIL-S-3786

Decks are grade L-422 steatite, treated with silicon to prevent surface moisture. Breakdown voltage between critical points is 1000 v-rms. Current carrying capacities are 0.45 amps at 115 v-ac, and 1.1 amps at 50 v-dc. (Make and break, resistive load.) Mounts with 3/8" bushing, has 32NEF-2A threads. Locating lug. Shaft is ¼" dia. full round, 2¼" long from panel. 30⁰ indexing with adjustable stops, except (*) which has 2 fixed positions. Silver clips and contacts. Switches may be made to special specifications using assembly below. Indexing assembly will accommodate 1-4 sections.

Cat. No. PA-600 Indexing assembly **Net Ea. $1.65**

SECTIONS FOR USE WITH PA-600§

Poles	Pos.	Mycalex	Phenolic	Ceramic
1	2-11	165-PA-70	165-PA-60	165-PA-80
2	2-5	165-PA-72	165-PA-62	165-PA-82
3	2-3	165-PA-74	165-PA-64	165-PA-84
4	2	165-PA-76	165-PA-66	165-PA-86
Net 1-4		$2.29	$1.56	$2.29
Net 5-9		1.90	1.30	1.90
Net 10-24		1.72	1.18	1.72

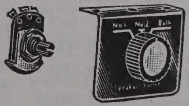
§Shorting type only shown. Non-shorting types available.

SINGLE SECTION

Non-Shorting Cat. No.	Shorting Cat. No.	Description Poles	Pos.	Net 1-4	Net 5-9	Net 10-24
165-PA-6001	165-PA-6000	1	2-11	$3.94	$3.28	$2.95
165-PA-6003	165-PA-6002	2	2-5	3.94	3.28	2.95
165-PA-6007	165-PA-6006	3	2-3	3.94	3.28	2.95
165-PA-6011*	165-PA-6010*	4	2	3.94	3.28	2.95

TWO SECTION

Non-Shorting Cat. No.	Shorting Cat. No.	Description Poles	Pos.	Net 1-4	Net 5-9	Net 10-24
165-PA-6005	165-PA-6004	2	2-11	$6.01	$5.01	$4.51
165-PA-6013	165-PA-6012	4	2-5	6.01	5.01	4.51
165-PA-6019	165-PA-6018	6	2-3	6.01	5.01	4.51
165-PA-6025*	165-PA-6024*	8	2	6.01	5.01	4.51



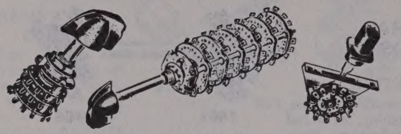
DUAL SPEAKER

SWITCH KIT

For rear seat auto radio speaker installations. Permits use of either one or both speakers simultaneously. Kit contains switch, mounting plate and bracket, knob, screws and instructions.

Cat. 165-PK-300 Switch Kit **Net $1.16**

MALLORY SWITCHES



MINIATURE ROTARY SWITCHES

MAX. WAFER DIA. 1-3/8"

With exclusive Wedgelock contacts which insure positive alignment, avoid frame and contact distortion and provide wide insulating paths between adacent contacts. Phenolic types use Richardson T725 grade phenolic. Ceramic types use MIL grade L5 steatite treated with Dow-Corning 200. Ratings: 250 ma. at 500 v-rms resistive. Breakdown 1700 v-rms 60 cps. Initial contact resistance .005 ohm. Bushing 3/8"-32 x 3/8" long. Shafts ¼" dia. x 2" long. With hex nut, washer and bar knob.

30° INDEXING PHENOLIC WAFER

Shorting Cat. No.	Non-Short Cat. No.	No. Decks	Switch Ea. Deck	O'All Depth	Net Ea.
47-4M11111	47-4M21111	1	1-P,11-Pos.	¾"	$2.13
47-4M1215	47-4M2215	1	2-P, 5-Pos.	¾"	2.13
47-4M1313	47-4M2313	1	3-P, 3-Pos.	¾"	2.13
....	47-4M2412	1	4-P,2-Pos.	¾"	2.13
47-4M11211	47-4M21211	2	1-P, 11-Pos.	1¼"	3.06
....	47-4M2225	2	2-P, 5-Pos.	1¼"	3.06
....	47-4M2323	2	3-P, 3-Pos.	1¼"	3.06
....	47-4M21311	3	1-P, 11-Pos.	1¾"	3.84
....	47-4M2235	3	2-P, 5-Pos.	1¾"	3.84
....	47-4M21411	4	1-P, 11-Pos.	2¼"	4.53
....	47-4M2245	4	2-P, 5-Pos.	2¼"	4.53
....	47-4M21511	5	1-P, 11-Pos.	2¾"	5.32
....	47-4M21611	6	1-P, 11-Pos.	3¼"	5.98

30° INDEXING CERAMIC WAFER

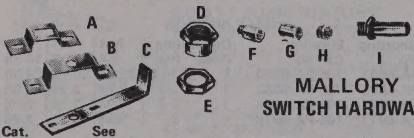
47-4M11112C	47-4M211112C	1	1-P, 12-Pos.	7/8"	$2.82
47-4M1216C	47-4M2216C	1	2-P, 6-Pos.	7/8"	2.82
....	47-4M2315C	1	3-P, 5-Pos.	7/8"	3.15
....	47-4M2513C	1	5-P, 3-Pos.	7/8"	2.82
47-4M1612C	47-4M2612C	1	6-P, 2-Pos.	7/8"	2.82
47-4M11212C	47-4M21212C	2	1-P, 12-Pos.	1-3/8"	4.44
47-4M1226C	47-4M2226C	2	2-P, 6-Pos.	1-3/8"	4.44
....	47-4M2325C	2	3-P, 5-Pos.	1-3/8"	4.86
47-4M11312C	47-4M21312C	3	1-P, 12-Pos.	1-7/8"	5.94
47-4M1236C	47-4M2236C	3	2-P, 6-Pos.	1-7/8"	6.24
....	47-4M2335C	3	3-P, 5-Pos.	1-7/8"	6.86
....	47-4M2533C	3	5-P, 3-Pos.	1-7/8"	7.32
....	47-4M21512C	5	1-P, 12-Pos.	2-7/8"	9.93
....	47-4M2266C	6	2-P, 6-Pos.	3-3/8"	2.82

60° INDEXING CERAMIC WAFER

....	47-4M2116H	1	1-P, 6-Pos.	7/8"	2.98

90° INDEXING CERAMIC WAFER

....	47-4M2114N	1	1-P, 4-Pos.	7/8"	2.89



MALLORY SWITCH HARDWARE

Cat. 47-★	See Fig.	Description	Net Ea.
232	E	7/16" hex nut, 3/8"-32	$.02
255	D	.218" panel shoulder	.13
A11260-12	D	.328" panel shoulder	.13
A11260-2	D	.578" panel shoulder	.13
RB248	A	1¾" mtg. ctrs. Adjustable mtg. bracket	.08
RB249	B	2½" mtg. ctrs. Adjustable mtg. bracket	.08
RB254	C	Universal adjustable mtg. bracket	.08
EC240	G	Univ. coupler & reducer. Couples ¼" to 3/16" shaft.	.72
EB247	F	Univ. extension bushing extends mtg. surface from panel by 5/8"	.22
UB241	H	Univ. bushing & nut 3/8"FMS .250 I D .375 OD.	.20
EB158	I	7/16" dble. flat bushing. Permits reduction of 3/8" bushing to 7/16".	.53
EB214	I	½" flatted bushing. Permits 3/8" bushing to be increased to ½".	.75

SUBMINIATURE SWITCHES

MAX. WAFER DIA. 7/8"

Glass-epoxy wafers per MIL-P-18177. Series 12M rotary switche have 3/16" spacing between decks. Mounting bushing 3/8"-32 3/8". Shafts ¼" dia. x 1¼" long. Series 12L lever switches have tw holes on 1¼" ctrs. Ratings: 150 ma. at 150 v.; max. volts 225 Furnished with mounting hardware and knob.

30° INDEXING GLASS-EPOXY WAFERS

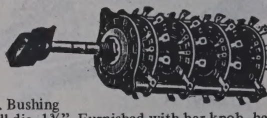
Shorting Cat. No.	Non-Short Cat. No.	No. Decks	Switch Ea. Deck	O'All Depth	Ne Ea
....	47-12M21111G	1	1-P, 11-Pos.	5/8"	$5.3
47-12M1215G	47-12M2215G	1	2-P, 5-Pos.	5/8"	5.3
47-12M1313G	47-12M2313G	1	3-P, 3-Pos.	5/8"	5.3
....	47-12M2412G	1	4-P, 2-Pos.	5/8"	5.3
....	47-12M21211G	2	1-P, 11-Pos.	55/64"	6.6
47-12M1225G	47-12M2225G	2	2-P, 5-Pos.	55/64"	6.6
....	47-12M2235G	3	2-P, 5- Pos.	1-3/32"	8.3

30° INDEXING GLASS-EPOXY LEVER SWITCHES

47-12L1612	47-12L2612	1	6-P, 2-Pos.	1-3/64"	$5.0
47-12L1612S	....	1	6-P, 2-Pos.	1-3/64"	5.3
47-12L1213	....	1	2-P, 3-Pos.	1-3/64"	3.6
47-12L1213S	47-12L2213S	1	2-P, 3-Pos.	1-3/64"	3.9
47-12L1413	47-12L2413	1	4-P, 3-Pos.	1-3/64"	4.3

S—spring return. U—spring return and positive.

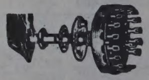
PHENOLIC WAFER SWITCHES



Self-cleaning silver-plated contacts rated 0.6 amps 300 v-dc, 1 amp 300 v-ac. Breakdown 1000 v-ac/dc. Adjustable stops. Indexing 30°. ¼" shaft 2" long. Bushing 3/8"-32 x 3/8". Max. o'all dia. 1¾". Furnished with bar knob, he nut and lockwasher. *Has additional "off" position precedin numbered positions. †Active positions per switch.

Shorting Cat. No.	Non-Shorting Cat. No.	No. of Decks	Sw. Per Deck	Positions †	O'All Depth	Ne Ea
47-1211L	47-1311L	1	1	2 to 11	7/8"	$2.6
47-1215L*	47-1315L*	1	2	2 to 5	7/8"	2.6
47-1213L*	47-1313L*	1	3	2 to 3	7/8"	2.6
47-1212L*	47-1312L*	1	4	2 to 2	7/8"	2.6
47-1221L	47-1321L	2	1	2 to 11	1½"	3.2
47-1225L*	47-1325L*	2	2	2 to 5	1½"	3.2
47-1223L*	47-1323L*	2	3	2 to 3	1½"	3.2
47-1222L*	47-1322L*	2	4	2 to 2	1½"	3.2
47-1231L	47-1331L	3	1	2 to 11	3-1/8"	4.0
47-1235L*	47-1335L*	3	2	2 to 5	3-1/8"	4.0
47-1241L	47-1341L	4	1	2 to 11	4-1/8"	4.8
47-1245L*	47-1345L*	4	2	2 to 5	4-1/8"	4.8
47-1251L	47-1351L	5	1	2 to 11	3-1/8"	5.1
47-1256L	47-1356L	5	2	2 to 6	3-1/8"	5.7
47-1261L	47-1361L	6	1	2 to 11	3-5/8"	6.1
47-1266L	47-1366L	6	2	2 to 6	3-5/8"	6.9

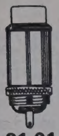
SINGLE SECTION SWITCHES



With phenolic insulation. Indexes: 1¼" dia. 30°; 1-11/16" dia. 20°. Ratings .125 amp 300 v-dc: .2 amp 300 v-ac. Breakdown 500 v-ac/dc. Max. non-breaking resistive load 5 amps. Bushing 3/8"-32 x 3/8". ¼" dia. x 2" shaft. With knob, nut, washer.

Shorting Cat. No.	Non-Short Cat. No.	Switch Action	Base Dia.	Adj. Stop	Ne Ea
47-3115J	47-3215J	1-P, 5-Pos.	1¼"	No	$1.2
47-31112J	47-32112J	1-P, 12-Pos.	1¼"	No	1.2
47-3122J	47-3222J	2-P, 2-Pos.	1¼"	No	1.2
47-3123J	47-3223J	2-P, 3-Pos.	1¼"	No	1.2
47-3126J	47-3226J	2-P, 6-Pos.	1¼"	No	1.2
47-3134J	47-3234J	3-P, 4-Pos.	1¼"	No	1.3
47-3142J	47-3242J	4-P, 2-Pos.	1¼"	No	1.3
47-3143J	47-3243J	4-P, 3-Pos.	1¼"	No	1.3
47-31117J	47-32117J	1-P, 2-17 Pos.	1-11/16"	Yes	1.9
47-3129J	47-3229J	2-P, 2-9 Pos.	1-11/16"	Yes	1.9
47-3136J	47-3236J	3-P, 2-6 Pos.	1-11/16"	Yes	2.0
47-3163J	47-3263J	6-P, 2-3 Pos.	1-11/16"	Yes	2.0

GRAYHILL SWITCHES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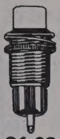
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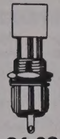
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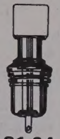
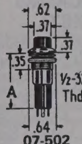

81-04

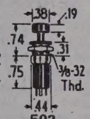
NEW SERIES 81 INDICATOR LIGHTS
LESS BUTTON CAPS

Designed for front panel bezel mounting, sub-panel mounting, and bushing mounting. Brass, nickel-plated lamp socket and lamp holder. Brass, lead tin-plated lamp terminals. Button cap color selection. Mountings: 9/16-32 UN-2A thread for square bezel mount indicator lights (fits up to 3/16" thick panel); 5/8-32 UN-2A thread for round bezel mount indicator light (fits up to 1/2" thick panel); 15/32-32 UNS-2A thread for both sub-panel and bushing mounting indicator lights. Length behind panel: 1.408" for front panel bezel mount indicator lights; .684" for both sub-panel and bushing mounting indicator lights. Button caps for Series 81 are the same as in Series 80 except when ordering insert "81" instead of "80" in Cat. No. i.e., 81-500B6162 for 1/2" sq. cap with keying, white bottom, amber top. Color codes and prices are the same for Series 81 and Series 80 caps.

Cat. No.	Indicator Light Style	Net 1-49	50-99
301-81-01	1/2" square, front panel bezel mtg.	$2.25	$1.69
301-81-02	1/2" round, front panel bezel mtg.	2.25	1.69
301-81-03	sub-panel mounting	1.30	.98
301-81-04	bushing mounting	1.60	1.20



07-502



502

PUSH-ON, PUSH-OFF SWITCHES

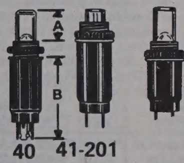
Reliable, alternate-action push-button switches for use in electronic equipment. Base is molded phenolic per MIL-M-14, Type CFG. Metal parts are brass, cadmium plated. Contacts are phosphor bronze, silver plated. Contact rating ¼ amp resistive at 115 v-ac. Contact resistance approx. 10 milliohms in a new switch. Voltage rating 1000 v-ac, terminal to terminal and terminal to bushing. Alternate action switches move .203" to lock in down position. Force required 1.1 ± .25 lbs. *For use with 46-502R and 46-502B. All SPDT

ALTERNATE ACTION, BREAK BEFORE MAKE

Cat. No.	Button	Dim. A	Ea. 1-9	10-24
301-46-502R	Red	......	$3.50	$2.63
301-46-502B	Black	......	3.50	2.63
301-46-05-07-502-0303	Red	1.278"	3.90	2.93
301-46-05-07-502-0707	Black	1.278"	3.90	2.93

MOMENTARY CONTACT, BREAK BEFORE MAKE

Cat. No.	Button	Dim. A	Ea. 1-9	10-24
301-46-05-05-502-0303	Red	.992"	2.35	1.76
301-46-05-05-502-0707	Black	.992"	2.35	1.76
301-30C1023	Decorative mounting nut*		.20	.15



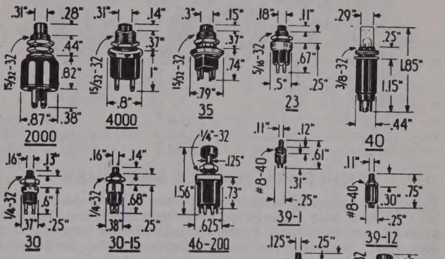
40 41-201

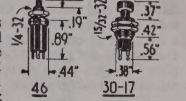
LED LIGHTED PUSH BUTTON SWITCHES AND INDICATOR LIGHTS

Reliable LED lighted switches and indicator lights. Ratings: (Series 40) Rated at 1 amp at 115 VAC. Contact Resistance: 25 milliohms or less on a new switch. Voltage Breakdown: 1000 VAC between mutually insulated parts. Insulation Resistance: 10,000 megohms minimum. Life Expectancy: 500,000 operations. Circuitry: SPST (NO) or (NC) momentary contact. Contacts and switch terminals are fine silver. Base is molded phenolic per MIL-M-14, type CFG. Clear button is molded CAB. Nut and housing are black anodized aluminum. Lamp terminals: Cathode—steel, gold plate. Anode—steel, tin plate. Series 41 are indicator lights which require current limiting resistor (not supplied). Operating voltage is 2-50 V. All units have .437" diameter.

Cat. No.	Circ.	Dimensions A	Dimensions B	Net 1-49	50-99
301-40-200	N.O.	.437	1.156	$4.40	$3.30
301-40-202	N.C.	.437	1.136	4.40	3.30
301-41-200	Ind. Lt.	.437	.892	3.85	2.90
301-41-201	Ind. Lt.	.170	1.156	3.85	2.90

PUSH-BUTTON SWITCHES
MINIATURE & SUB-MINIATURE





Extremely small units with many uses in compact electronic and electrical equipment. Models 2201 and 2202 have snap action, all others are silent. Molded phenolic housings with cadmium plated brass parts. Push-button colors: *red; †black. §Resistive loads at 115 v-ac. Models 7-21 and 7-22 have Faston terminals, all others solder terminals.

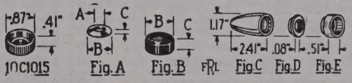
PUSH, MOMENTARY CONTACT

Cat. No.	Contacts	Amps Cur.§	Act. Force	Pre-travel	Ea. 1-49	50-99
301-2201*	SP-ST-NO	10.0	20 oz.	.060"	$2.85	$2.14
301-2202†	SP-ST-NC	10.0	20 oz.	.060"	2.85	2.14
301-7-21*	SP-ST-NO	10.0	20 oz.	.060"	3.25	2.44
301-7-22†	SP-ST-NC	10.0	20 oz.	.060"	3.25	2.44
301-4001*	SP-ST-NO	0.5	20 oz.	.110"	1.05	.79
301-4002†	SP-ST-NC	0.5	25 oz.	.110"	1.05	.79
301-35-1*	DP-ST-NO	0.5	16 oz.	.050"	1.50	1.13
301-30-1*	SP-ST-NO	1.0	10 oz.	.065"	.90	.68
301-30-2†	SP-ST-NC	1.0	10 oz.	.065"	.90	.68
301-30-15*	SP-ST-NO	1.0	10 oz.	.065"	1.10	.83
301-30-17R*	SP-ST-NO	1.0	1.1 lbs.	.141"	1.50	1.13
301-30-17B†	SP-ST-NO	1.0	1.1 lbs.	.141"	1.50	1.13
301-39-1*	SP-ST-NO	0.5	4 oz.	.035"	1.15	.86
301-39-12*	SP-ST-NO	0.5	5 oz.	.085"	1.30	.98
301-46-101B†	SP-DT	0.25	16 oz.	.187"	1.40	1.05
301-46-101R*	SP-DT	0.25	16 oz.	.187"	1.40	1.05
301-23-1*	SPST-NO	0.25	16 oz.	.050"	1.20	.90
301-46-200B†	DP-DT	0.25	32 oz.	.187"	3.10	2.33
301-46-200R*	DP-DT	0.25	32 oz.	.187"	3.10	2.33

LIGHTED PUSH-BUTTON SWITCH

With transparent plastic push-button, 40-1 uses NE-2E G. E. neon lamp and requires external 62K or 200K ohm resistor. It is available with clear, amber, red or frosted white button. 40-100 uses G. E. 1764 20-volt incandescent lamp, and is available in clear, amber, red, white, green or yellow. Specify the color required when ordering or clear will be shipped.

Cat. No.	Contacts	Amps Cur.§	Act. Force	Pre-travel	Ea. 1-49	50-99
301-40-1	SP-ST-NO	1.0	16 oz.	.067"	2.65	1.99
301-40-100	SP-ST-NO	1.0	16 oz.	.067"	2.95	2.21

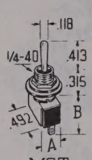


ACCESSORIES

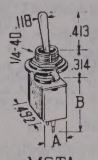
Button guard replaces mounting nut and prevents accidental operation of button. Ornamental mounting nut (Fig. A) replaces hex nut. Molded caps (Fig. B) are available for cementing to the push-button top. 7Z1047 is 1" dia., is available in red or black only. 30B1012 is 0.25" dia., is available in black, red, green, lt. green, blue, lt. blue, yellow, pink, white or gray. Specify color when ordering. *Pendant enclosure set (Fig. C) with plain end (Fig. D) or recessed end (Fig. E) takes push-button switches with 15/32-32 bushings.

Cat. No.	Description	Used With	Ea. 1-49	50-99
301-10C1015	Button guard	2000, 4000, 35	$0.30	$0.225
301-7C1040	Mtg. nut (A)	2000, 4000, 35	.20	.15
301-23C1024	Mtg. nut (A)	23-1	.20	.15
301-30C1023	Mtg. nut (A)	30-1, 30-2, 30-15	.20	.15
301-7Z1047	Color cap (B)	2000	.40	.30
301-30B1012	Color cap (B)	30-1, 30-2, 30-15	.10	.075
301-7Z4950*	W/pin. end (D)	Ea. set includes	1.40	1.05
301-7Z5051*	W/recessed (E)	(C) with (D) or (C) with (E)		
301-12C1087	Lock washer	For tap switches	.05	.038
301-12Q1272	Lock washer	Internal tooth	.05	.038

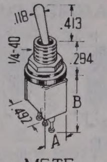
ALCOSWITCHES®



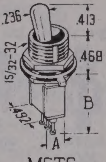
MST



MSTA



MSTE



MSTG

MINIATURE TOGGLE SWITCHES

For modern equipment where front and rear of panel space is limited. One-piece body construction with toggle linked directly to the moveable contact member. Positive detent action for improved "operator feel". Solid silver contacts with high voltage barriers between terminals and contacts. Contact rating 6 amps @ 125 v-ac, or 28 v-dc. 1000 v-ac breakdown between terminals and case ground for a duration of one minute. Operating force below 1.5 Kg. Typical dimensions are given above and in the listings below. *Give complete Cat. No. when ordering, i.e., 448-MST-105D. †Indicates momentary contact position.

SERIES MST

Molded black phenolic case with solder terminals. Life cycle 80,000 (SPDT), 50,000 (DPDT). 25,000 (3PDT, 4PDT), on-off switching operations at rated current.

Cat. 448-*	Contacts	Switch Action	Dim. "A"	Dim. "B"	Ea. 1-24	25-99	100-499
MST-105D	SPDT	On-None-On	.244	.625	$1.65	$1.12	$0.99
MST-105E	SPDT	On-Off-On	.244	.625	1.95	1.33	1.17
MST-105F	SPDT	On†-On-None	.244	.625	1.95	1.33	1.17
MST-105G	SPDT	On†-Off-On†	.244	.625	1.95	1.33	1.17
MST-105H	SPDT	On†Off-On	.244	.625	1.95	1.33	1.17
MST-205N	DPDT	On-None-On	.483	.625	2.20	1.50	1.32
MST-205P	DPDT	On-Off-On	.483	.625	2.55	1.74	1.53
MST-205R	DPDT	On†-On-None	.483	.625	2.55	1.74	1.53
MST-205S	DPDT	On†-Off-On†	.483	.625	2.55	1.74	1.53
MST-205T	DPDT	On†-Off-On	.483	.625	2.55	1.74	1.53
MST-305D	3PDT	On-None-On	.638	.655	3.70	2.52	2.22
MST-305E	3PDT	On-Off-On	.638	.655	4.00	2.72	2.40
MST-305F	3PDT	On†-On-None	.638	.655	4.00	2.72	2.40
MST-305H	3PDT	On†-Off-On	.638	.655	4.00	2.72	2.40
MST-405N	4PDT	On-None-On	.826	.655	4.75	3.23	2.85
MST-405P	4PDT	On-Off-On	.826	.655	5.15	3.50	3.09

SERIES MSTA

Molded, hi-temp, high impact case with pin terminals for PC and simplified wiring. Life over 100,000 on-off operations (SPDT). Withstands 10-55 cps vibration, 0.06" total amplitude @ 20 g's. Withstands 50 g's shock — 11 milliseconds duration.

Cat. 448-*	Contacts	Switch Action	Dim. "A"	Dim. "B"	Ea. 1-24	25-99	100-499
MSTA-106D	SPDT	On-None-On	.257	.650	$1.80	$1.23	$1.08
MSTA-106E	SPDT	On-Off-On	.257	.650	2.25	1.53	1.35
MSTA-106F	SPDT	None-On-On†	.257	.650	2.25	1.53	1.35
MSTA-106G	SPDT	On†-Off-On†	.257	.650	2.25	1.53	1.35
MSTA-106H	SPDT	On-Off-On†	.257	.650	2.25	1.53	1.35
MSTA-206R	DPDT	None-On-On†	.453	.650	2.85	1.94	1.71
MSTA-206S	DPDT	On†-Off-On†	.453	.650	2.85	1.94	1.71
MSTA-206T	DPDT	On-Off-On†	.453	.650	2.85	1.94	1.71
MSTA-306D	3PDT	On-None-On	.638	.670	4.05	2.75	2.43
MSTA-306E	3PDT	On-Off-On	.638	.670	4.45	3.03	2.67
MSTA-406N	4PDT	On-None-On	.827	.670	5.10	3.47	3.06
MSTA-406P	4PDT	On-Off-On	.827	.670	5.65	3.84	3.39

WATERPROOF SERIES MSTE

Withstands 3.3 ft. head of water for 30 min. "0" ring waterseal between handle and bushing and between bushing flange and mounting panel. Molded, hi-temp, high impact case with turret type terminals. Same vibration and shock rating as Series MSTA.

Cat. 448-*	Contacts	Switch Action	Dim. "A"	Dim. "B"	Ea. 1-24	25-99	100-499
MSTE-106D	SPDT	On-None-On	.257	.721	$1.95	$1.33	$1.17
MSTE-106E	SPDT	On-Off-On	.257	.721	2.55	1.74	1.53
MSTE-106F	SPDT	None-On-On†	.257	.721	2.55	1.74	1.53
MSTE-106G	SPDT	On†-Off-On†	.257	.721	2.55	1.74	1.53
MSTE-106H	SPDT	On-Off-On†	.257	.721	2.55	1.74	1.53
MSTE-206N	DPDT	On-None-On	.453	.721	2.55	1.74	1.53
MSTE-206P	DPDT	On-Off-On	.453	.721	3.15	2.14	1.89

Continued in Next Column.

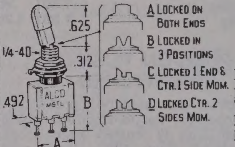
WATERPROOF SERIES MSTE CONT'D.

Cat. 448-*	Contacts	Switch Action	Dim. "A"	Dim. "B"	Ea. 1-24	25-99	10 4
MSTE-206R	DPDT	None-On-On†	.453	.721	$3.15	$2.14	$1.8
MSTE-206S	DPDT	On†-Off-On†	.453	.721	3.15	2.14	1.8
MSTE-206T	DPDT	On-Off-On†	.453	.721	3.15	2.14	1.8
MSTE-306D	3PDT	On-None-On	.638	.760	4.25	2.89	2.5
MSTE-306E	3PDT	On-Off-On	.638	.760	4.75	3.23	2.8
MSTE-406N	4PDT	On-None-On	.827	.760	5.35	3.64	3.
MSTE-406P	4PDT	On-Off-On	.827	.760	5.95	4.05	3.

MUSTANG SERIES MST

Conventional front size but miniature back of panel. Molded, h temp, high impact case with turret terminals. Life cycle ov .100,000 (SPDT), 80,000 (DPDT), 20,000 (3PDT, 4PDT) on-o operations at rated current.

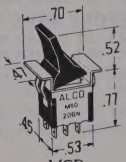
Cat. 448-*	Contacts	Switch Action	Dim. "A"	Dim. "B"	Ea. 1-24	25-99	10 4
MSTG-106D	SPDT	On-None-On	.257	.662	$2.15	$1.46	$1.2
MSTG-106E	SPDT	On-Off-On	.257	.662	2.75	1.87	1.6
MSTG-206N	DPDT	On-None-On	.453	.662	2.75	1.87	1.6
MSTG-206P	DPDT	On-Off-On	.453	.662	3.35	2.28	2.0
MSTG-306D	3PDT	On-None-On	.638	.700	4.45	3.03	2.6
MSTG-306E	3PDT	On-Off-On	.638	.700	4.95	3.37	2.9
MSTG-406N	4PDT	On-None-On	.826	.700	5.55	3.77	3.3
MSTG-406P	4PDT	On-Off-On	.826	.700	6.15	4.18	3.6



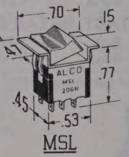
LEVER LOCKING SERIES MSTL

Positive "pull-to-unlock" featu prevents accidental switchin Typical dimensions and leve locking chart are shown at th left. Molded, hi-temp, high in pact case with turret termina Silver contacts rated 6 amps @ 125 v-ac, or 28 v-dc. Voltage ba riers between terminals inside and out. *Give complete Cat. N when ordering, i.e., 448-MSTL-106D. †Momentary contact.

Cat. 448-*	Contacts	Switch Action	Lock Fig.	Dim. "A"	Dim. "B"	Ea. 1-24	2
MSTL-106D	SPDT	On-None-On	(A)	.260	.675	$3.15	$2.
MSTL-106E	SPDT	On-Off-On	(B)	.260	.675	3.85	2.
MSTL-106F	SPDT	None-On-On†	(C)	.260	.675	3.85	2.
MSTL-106G	SPDT	On†-Off-On†	(D)	.260	.675	3.85	2.
MSTL-206N	DPDT	On-None-On	(A)	.453	.675	3.85	2.
MSTL-206P	DPDT	On-Off-On	(B)	.453	.675	4.45	3.
MSTL-206R	DPDT	None-On-On†	(C)	.453	.675	4.45	3.
MSTL-206S	DPDT	On†-Off-On†	(D)	.453	.675	4.45	3.



MSD



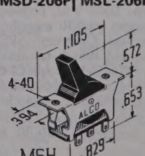
MSL

MINI-LEVER & ROCKETT

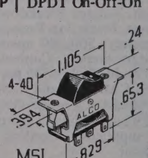
Molded black phenolic ca with snap-in mounting ta and solder terminals. Silv contacts rated 6 amps 125 v-ac, or 28 v-dc. Opera ing force 200/300 gr (MSD), 500/700 gm. (MSL

Specify white, red, black or gray lever actuator color.

Cat. 448-*	Cat. 448-*	Contacts	Switch Action	Ea. 1-24	25-99	10 4
MSD-106D	MSL-106D	SPDT	On-None-On	$1.90	$1.29	$1.
MSD-106E	MSL-106E	SPDT	On-Off-On	2.10	1.43	1.2
MSD-206N	MSL-206N	DPDT	On-None-On	2.25	1.53	1.3
MSD-206P	MSL-206P	DPDT	On-Off-On	2.70	1.84	1.6



MSH



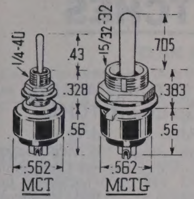
MSL

MSH & MSL SERIES

Molded black phenol bodies with solder te minals. Silver-plate contacts rated 3 am @ 125 v-ac. Estimate life 25,000 on-off o erations at rated current. Lever and rocker color black onl

Cat. No.	Contacts	Switch Action	Ea. 1-24	25-99	100-499	50 9
448-MSH-203N	DPDT	On-On	$1.65	$1.12	$0.99	$0.
448-MSL-203N	DPDT	On-On	1.55	1.05	.93	.

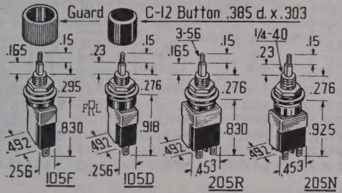
ALCOSWITCHES®



MCT & MCTG SERIES 10 AMP TOGGLES

With metal cases and high impact insulation for use under severe environmental conditions. Solid silver contacts. U.L. listed for 10 amps @125 v-ac. Terminals are silver-plated brass, solder-cup type. Mechanical life 250,000 on-off switching actions at rated current. Choice of .250" or .500" mounting bushings. *Give complete Cat. No. i. e., 448-MCT-110D when ordering.

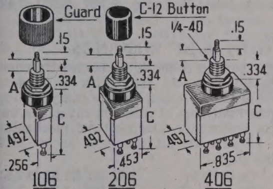
Cat. No. *	Contacts	Switch Action	Ea. 1-24	25-99	100-499	500-999
448-MCT-110D	SPDT	On-None-On	$1.95	$1.33	$1.17	$0.98
448-MCT-210N	DPDT	On-None-On	2.55	1.74	1.53	1.28
448-MCTG-110D	SPDT	On-None-On	1.95	1.33	1.17	.98
448-MCTG-210N	DPDT	On-None-On	2.55	1.74	1.53	1.28



PUSHBUTTON SWITCHES
SERIES MSP

Snap-Action switches with silver contacts rated 6 amps at 125 v-ac. Choice of momentary or push-push alternate action. Case is molded black phenolic with solder terminals. Switches are supplied with black knob. Accessory button guards are also available. *Give complete Cat. No. i. e., 448-MSP-105D when ordering.

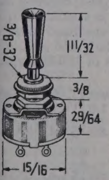
Cat. 448-*	Contacts	Switch Action	Ea. 1-24	25-99	100-499	500-999
MSP-105D	SPDT	Push On-Off	$2.35	$1.60	$1.41	$1.18
MSP-105F	SPDT	Momentary	2.35	1.60	1.41	1.18
MSP-205N	DPDT	Push On-Off	3.20	2.18	1.92	1.60
MSP-205R	DPDT	Momentary	3.20	2.18	1.92	1.60
G-12-KC	Chrome	button Guard	.35	.24	.21	.19



WATERPROOF MSPE SERIES

Withstands 3.3 ft. head of water for 30 minutes. "0" ring waterseal between handle and bushing and between bushing flange and mounting panel. Operating force below 2.4 Kg. Silver contacts rated 6 amps @ 125 v-ac, or 4 amps @ 28 v-dc. Furnished with black button. Accessory button guard available. *Give complete Cat. No. i. e., 448-MSPE-106D when ordering.

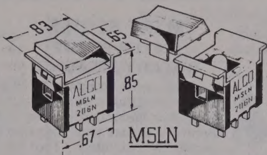
Cat. 448-*	Contacts	Switch Action	Ea. 1-24	25-99	100-499	500-999
MSPE-106D	SPDT	Push On-Off	$2.75	$1.87	$1.65	$1.38
MSPE-106F	SPDT	Momentary	2.75	1.87	1.65	1.38
MSPE-206N	DPDT	Push On-Off	3.65	2.48	2.19	1.83
MSPE-206R	DPDT	Momentary	3.65	2.48	2.19	1.83
MSPE-406N	4PDT	Push On-Off	5.95	4.05	3.57	2.98
MSPE-406R	4PDT	Momentary	5.95	4.05	3.57	2.98
G-12-KC	Chrome	button guard	.35	.24	.21	.19



MALLORY
PUSH-PULL A-C SWITCH

With integral aluminum handle designed and tooled to compliment the finest electronic equipment. Furnished with nickel plated, knurled mounting ring nut. Current ratings are U. L. approved for 125 v-ac.

Cat. No.	Contacts	Contact Rating	Net Each
47-PPS1	SP-ST	6 amps @ 125 v-ac	$1.12
47-PPS2	DP-ST	6 amps @ 125 v-ac	1.46
47-PPS3	SP-DT	3 amps @ 125 v-ac	1.46

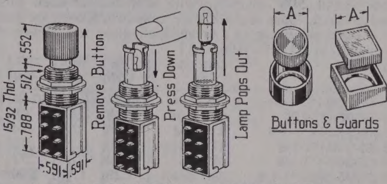


SERIES MSLN ILLUMINATED ROCKER SWITCHES

Features front panel lamp replacement. Snap-in mounting in .660" x 720" hole from the front panel. Current rating 6 amps @ 125 v-ac, 4 amps @ 28 v-dc. Contacts and terminals are silver. Operating force 500/700 grams approx. Case material black phenolic. Rocker cap is available in white, red, green, or amber. Specify color when ordering. Furnished less T-1¾ sub-miniature lamp. *When ordering give complete Cat. No. i. e., 448-MSLN-206N.

Cat. 448-*	Contacts	Switch Action	Ea. 1-24	25-99	100-499	500-999
MSLN-206N	DPDT	On-None-On	$4.45	$3.03	$2.67	$2.23
MSLN-206P	DPDT	On-Off-On	4.75	3.23	2.85	2.38
WLR		Lamp removal tool	.15	.12	.12	.12

Accessory lamps: Type 378 6.3 v., Type 362 14 v., Type 399 28 v.

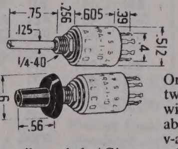


SERIES MSPN ILLUMINATED
PUSH-BUTTON SWITCHES

Snap-action push-button switches U. L. listed for 6 amps @ 125 v-ac. The T-1¾ sub-miniature lamps are replaceable from the front of panel as illustrated above. Case material black phenolic. Operating force 0.6 to 1.1 Kg. Furnished less accessory lamp, button and button guard. *When ordering give complete Cat. No. i. e., 448-MSPN-206N, and specify button shape and color, button guard shape, and lamp type and voltage.

Cat. 448-*	Contacts	Switch Action	Ea. 1-24	25-99	100-499	500-999
MSPN-206N	DPDT	Push On-Off	$5.95	$3.84	$3.39	$2.83
MSPN-206R	DPDT	Momentary	5.95	3.84	3.39	2.83
RS§	1/2" round button		.15	.10	.09	.08
RM§	5/8" round button		.18	.12	.11	.10
RL§	3/4" round button		.20	.14	.12	.11
SS§	1/2" square button		.15	.10	.09	.08
SM§	5/8" square button		.18	.12	.11	.10
SL§	3/4" square button		.20	.14	.12	.11
CGR-1/2†	1/2" round guard		.35	.24	.21	.19
CGR-5/8†	5/8" round guard		.45	.31	.27	.25
CGR-3/4†	3/4" round guard		.55	.37	.33	.30
CGS-1/2‡	1/2" square guard		.35	.24	.21	.19
CGS-5/8‡	5/8" square guard		.45	.31	.27	.25
CGS-3/4‡	3/4" square guard		.55	.37	.33	.30

§For transparent colors specify red, amber, blue, green or clear. †Chromed brass finish. ‡Chromed plastic finish. Accessory lamps: Type 379 6.3 v., Type 386 14 v., or Type 388 28 v.



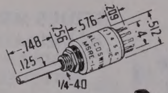
SERIES MRA
ULTRA-MINIATURE ROTARY SWITCHES

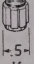
Only ½" in diameter. Available with one, two, three or four poles on a single deck with a maximum of ten positions. Adjustable stop. Current rating 500 ma. @ 125 v-ac or 28 v-dc. Contacts and terminals are silver clad. *Give complete Cat. No. when ordering, i. e., 448-MRA-1-10.

Cat. 448-*	Poles	Position	With Knob	Ea. 1-24	25-99	100-499	500-999
MRA-1-10	1	2-10	Yes	$4.95	$3.37	$2.97	$2.48
MRA-2-5	2	2-5	Yes	4.95	3.37	2.97	2.48
MRA-3-3	3	2-2	Yes	4.95	3.37	2.97	2.48
MRA-1-10S	1	2-10	No	4.90	3.33	2.94	2.45
MRA-2-5S	2	2-5	No	4.90	3.33	2.94	2.45
MRA-1-12S	1	2-12	No	6.25	4.25	3.75	3.13
MRA-1-12SC	1	12	No	6.25	4.25	3.75	3.13
MRA-4-3S	4	3	No	6.25	4.25	3.75	3.13

ALCOSWITCH

KD





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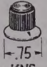


KNS

KS

KC

KCVS

MSRE SERIES
WATER-PROOF ROTARY SWITCHES

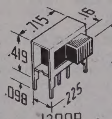
For use under extreme environmental conditions. The one-piece metal case has sealed bushing and terminals that are ideal for printed circuits. Withstands 3.3 foot head of water for 30 minutes. Contact rating 500 ma. @ 125 v-ac, or 28 v-dc. Switch contacts and terminals are silver. Furnished less knob. ★Give complete Cat. No. when ordering, i. e., 448-MSRE-1-10.

Cat. 448-★	Poles	Posi- tions	Ea. 1-24	25- 99	250- 499	500- 999
MSRE-1-10	1	10	$5.95	$4.05	$3.57	$2.98
MSRE-2-5	2	5	5.95	4.05	3.57	2.98
MSRE-3-3	3	3	5.95	4.05	3.57	2.98
MSRE-4-2	4	2	5.95	4.05	3.57	2.98

KNOBS FOR 1/8" DIAMETER SHAFTS

Knobs are all .500" diameter, with hole and set-screw for 1/8" diameter shaft. Skirt diameters are as shown. Knobs are available with natural aluminum (A), or black anodized (BA) finish. Insert (A) or (BA) at (*) when ordering.

Cat. No.	Descrip- tion	Ea. 1-99	100- 249	250- 499	500- 999
448-KD-500-(*)-1/8	Knurled	$0.75	$0.68	$0.64	$0.60
448-K-500-(*)-1/8	Standard	.65	.59	.56	.52
448-KNS-501-(*)-1/8	Knurled	1.10	.99	.94	.88
448-KS-500-(*)-1/8	Skirted	.85	.77	.73	.68
448-KC-500-(*)-1/8	Skirted	.90	.81	.77	.72
448-KCVS-500-(*)-1/8	Adj. Stop	1.25	1.13	1.06	1.00



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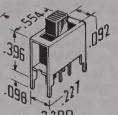

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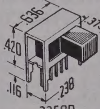

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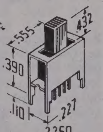

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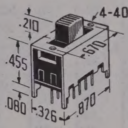

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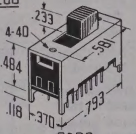

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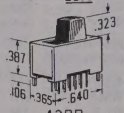

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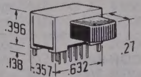
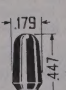


4200R

MSS MINIATURE P.C. SLIDE SWITCHES

For tab mounting directly to printed circuit boards. Make-before-break contacts are rated 0.3 amp @ 125 v-ac. Switch contact terminals are on a .079" spacing. Switches are available with knobs for top or side actuation as illustrated above.

Cat. No.	Switch Action	Ea. 1-24	25- 99	100- 499	500- 999
448-MSS-12000R	SP-DT	$0.60	$0.41	$0.36	$0.30
448-MSS-2200	DP-DT	.65	.44	.39	.33
448-MSS-2250	DP-DT	.70	.48	.42	.35
448-MSS-2250R	DP-DT	.80	.55	.48	.40
448-MSS-4200	4P-DT	.75	.51	.45	.38
448-MSS-4200R	4P-DT	.85	.58	.51	.44
448-MSS-4300	4P-3T	.95	.65	.57	.48
448-MSS-6200	6P-DT	.95	.65	.57	.48



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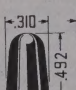

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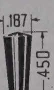


C-17

COLOR-CODED CAPS
FOR TOGGLE SWITCHES

Slip-on color-coded caps for use in identifying toggle switches used in aircraft, computer and hazardous applications. Caps are packaged in multiples of 25 of one color. (*)Specify red, white, black, blue, gray, yellow or pink. (†)Specify red, white, black, blue, or green when ordering.

Cat. No.	For Switch Types	25- 99	100- 499	500- 999
448-C-10-(*)	MST, MSTA, MSTE	$0.05	$0.04	$0.03
448-C-15-(†)	MSTG	.05	.04	.03
448-C-17-(*)	MST, MSTA, MSTE	.05	.04	.03

J-B-T SWITCHES

LFH

LL

15

NEW SUB-MINIATURE TOGGLE SWITCHES
SERIES LFH, LL & 15

5 amps resistive load, 125 VAC and 2 DC. Initial contact resistance 5 milliohn maximum. 3 VDC, 100 milliamps. In sulation resistance: 10,000 Megohm min. Dielectric Strength: 1,000 volts rn at sea level. Life under load is 100,000 make-and break cycles mi imum for all suffix-23 models; 60,000 for others. Switching co tacts and rockers are coin silver; center terminal silver plate Switch bodies are molded of plastic selected for high strengt and arc resistance.

SERIES LFH WITH FLAT HANDLES

This new series has flat handles (paddle levers) that are easy grasp, give good sensing of the direction of throw, and order panel appearance. Standard finish is satin chrome, with brig nickel. *Momentary position.

Cat. No.	Cir- cuit	Circuit Control	Net 1-9	10- 29	3 9
138-LFH-121	SPDT	On-Off-On	$2.70	$2.18	$1.9
138-LFH-123	SPDT	On-None-On	2.40	1.96	1.7
138-LFH-127	SPDT	On*-Off-On*	2.58	2.29	2.0
138-LFH-221	DPDT	On-Off-On	3.30	2.62	2.3
138-LFH-223	DPDT	On-None-On	2.90	2.33	2.0
138-LFH-227	DPDT	On*-Off-On*	3.45	2.73	2.4

SERIES LL WITH LOCKING LEVERS

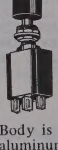
Made with spring loaded locking mechanism to prevent acciden shifting of the levers. A definite advantage on planes, ships, trai or other vehicles where sudden motion might cause switching erro Also for test equipment and other instrumentation or computer c cuits where accumulated data might be lost through unintention switching. The operator must think about the switching operati before he can complete it. Normally stocked with natural aluminu caps, but for circuit identification caps can be supplied wi anodized colors: red, black, blue, gold, green.

138-LL-121	SPDT	On-Off-On	$3.70	$3.30	$2.
138-LL-122	SPDT	On-None-Off	3.10	2.80	2.
138-LL-123	SPDT	On-None-On	3.10	2.80	2.
138-LL-221	DPDT	On-Off-On	4.35	3.90	3.
138-LL-222	DPDT	On-None-Off	3.70	3.35	2.
138-LL-223	DPDT	On-None-On	3.70	3.35	2.

SERIES 15 WITH 15/32" BUSHINGS

These sub-miniature toggle switches combine the behind-the-pa space saving feature of the standard JMT Series with the front- panel appearance of standard size switches. Used in many appli tions where circuitry requires switches of different capacities, b good panel design calls for uniformity. Electrical and mechani characteristics of Series 15 switches are the same as for JN switches given on another page.

138-15-121	SPDT	On-Off-On	$2.30	$1.68	$1.
138-15-123	SPDT	On-None-On	2.00	1.46	1.
138-15-126	SPDT	On-None-On*	2.30	1.68	1.
138-15-127	SPDT	On*-Off-On*	2.45	1.79	1.
138-15-221	DPDT	On-Off-On	2.90	2.12	1.
138-15-223	DPDT	On-None-On	2.50	1.83	1.
138-15-226	DPDT	On-None-On*	2.90	2.12	1.
138-15-227	DPDT	On*-Off-On*	3.05	2.23	2.



NEW SERIES PB
PUSH BUTTON SWITCHES

Same specifications as above types. Force required operate: Less than 2 lbs. Rapid break generate audi click. Weight, including hardware: Single-pole 0.4 Bushing and plunger are nickel plated brass; bushing shoulder for greater strength. Clamp is stainless ste Body is high-strength plastic. Standard knob is anodized natu aluminum. Anodized colors: green, blue, red, black and gold also available at extra cost. Mounting in panel is in ¼" D-sha hole.

Cat. No.	Circuit Action	Net 1-9	10- 29	
138-PB-123	SPDT Maintained Action. Push to make and push again to reverse action.	$1.95	$1.47	$1
138-PB-126	SPDT Momentary Action. Normally open, or normally closed. (Determined by how wired).	$1.95	$1.47	$1

J-B-T TOGGLE SWITCHES

COIN SILVER CONTACTS

Contact resistance less than 0.005 ohms per pole. Current rating: 20 amps at 125 v-ac; 10 amps at 250 v-ac. Dielectric insulation exceeds 900 v-rms at 60 cps. Specially lubricated for high humidity and temperatures from 185° F. to -67° F. Terminals easily withstand 30-pound pull test. 32NS-2 threaded bushings are 15/32" dia. Other dimensions are given to the left. ST types comply with JAN-S-23 specs. MS types comply with MIL-S-3950 specs, and have a silicone rubber bushing lever seal which meets sand, dust and 15-foot head of water submersion tests. *Indicates momentary contact.

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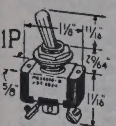

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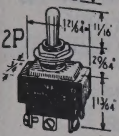

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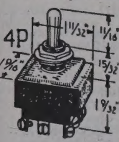


WITH SOLDER TERMINALS

Cat. No.	Action	Circuit Control	Net 1-24	25-49	50-99
138-ST42A	SPST	On-Off	$1.17	$1.03	$0.89
138-ST42B	SPST	On-Off*	1.35	1.19	1.02
138-ST42C	SPST	Off-On*	1.25	1.10	.96
138-ST42D	SPDT	On-On	1.34	1.16	1.01
138-ST42E	SPDT	On-Off-On	1.34	1.16	1.01
138-ST42F	SPDT	On-On*	1.47	1.30	1.12
138-ST42G	SPDT	On*-Off-On*	1.47	1.30	1.12
138-ST42H	SPDT	On-Off-On*	1.47	1.30	1.12
138-ST52K	DPST	On-Off	1.82	1.35	1.13
138-ST52L	DPST	On-Off*	2.12	1.60	1.33
138-ST52M	DPST	Off-On*	2.12	1.60	1.33
138-ST52N	DPDT	On-On	2.02	1.52	1.27
138-ST52P	DPDT	On-Off-On	2.02	1.52	1.27
138-ST52R	DPDT	On-On*	2.35	1.75	1.47
138-ST52S	DPDT	On*-Off-On*	2.46	1.84	1.54
138-ST52T	DPDT	On-Off-On*	1.35	1.75	1.47

WITH SCREW TERMINALS

Cat. No.	Action	Circuit Control	Net 1-24	25-49	50-99
138-ST40A	SPST	On-Off	$1.31	$1.19	$1.03
138-ST-40B	SPST	On-Off*	1.60	1.40	1.20
138-ST-40C	SPST	Off-On*	1.60	1.40	1.20
138-ST-40D	SPDT	On-On	1.61	1.42	1.23
138-ST-40E	SPDT	On-Off-On	1.61	1.42	1.23
138-ST-40F	SPDT	On-On*	1.87	1.64	1.40
138-ST-40G	SPDT	On*-Off-On*	1.76	1.55	1.34
138-ST-40H	SPDT	On-Off-On*	1.87	1.64	1.40
138-ST-50K	DPST	On-Off	1.98	1.48	1.26
138-ST-50L	DPST	On-Off*	2.43	1.81	1.50
138-ST-50M	DPST	Off-On*	2.43	1.81	1.50
138-ST-50N	DPDT	On-On	2.32	1.74	1.45
138-ST-50P	DPDT	On-Off-On	2.32	1.74	1.45
138-ST-50R	DPDT	On-On*	2.63	1.98	1.66
138-ST-50S	DPDT	On*-Off-On*	2.73	2.09	1.75
138-ST-50T	DPDT	On-Off-On*	2.63	1.98	1.66

4P-ST WITH LEVER SEAL

138-MS25068-24	On-Off	....	4.08†	3.44
138-MS25068-25	On-Off*	....	4.83†	4.05
138-MS25068-28	Off-On*	....	4.83†	4.05

4P-DT WITH LEVER SEAL

138-MS25068-21	On-Off-On	....	4.75†	4.00
138-MS25068-23	On-On	....	4.83†	4.05
138-MS25068-26	On-On*	....	5.12†	4.31
138-MS25068-27	On*-Off-On*	....	5.12†	4.31
138-MS25068-31	On-Off-On*	....	5.12†	4.31

†Each 1-49.

NEW J-B-T TYPE SUB-MINIATURE TOGGLE SWITCHES

Primarily designed for manually controlled, low-current, solid-state devices and miniaturized circuitry for computers, instruments, space, geophysical, and test apparatus, these tiny switches also have application in aircraft, communications, and electronic equipment. Single-pole types are ¼" thin, double-pole types less than ½" square, 3-pole and 4-pole types correspondingly small. All use single-hole mounting with ¼" threaded bushing. Rating: 5 A resistive load, 125VAC & 24VDC. Initial Contact Resistance: 5 milliohms max. 3VDC. 100 milliamps, 10,000 Megohms, Min. Dielectric Strength: 1,000 volts rms at sea level. Life Under Load; 100,000 make-and-break cycles, min. Weight, Including Hardware; SPDT. 0.19 oz.; DPDT, 0.23 oz.; 3-Pole, 0.28 oz.; 4-Pole, 0.32 oz. Switching contacts and rockers are coin silver; center terminal silver-plated. Bat handle is bright chrome-plated brass. Case and cradle are molded of colored phenolic. For additional information ask for J-B-T Catalog TS-966.

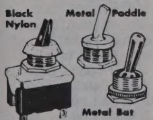
COLOR CAPS—Switches are normally supplied with bat handles. For color coding, tight grip insulator caps are available for easy attachment before or after switches are mounted. To order specify W-CAP (10A) White; (10B) Blue; (10C) Red; (10D) Black; (10E) Brown; (10F) Orange; (10G) Yellow; (10H) Green; (10I) Violet; (10J) Gray. For example part no. for red cap would be W-CAP-10C. **Net Each $.02**

Cat. No.	Circuit	Circuit Control	Net 1-9	10-29	30-99
138-JMT121	SPDT	On-Off-On	$1.95	$1.43	$1.30
138-JMT123	SPDT	On-On	1.65	1.21	1.10
138-JMT127	SPDT	On*-Off-On*	2.10	1.54	1.40
138-JMT131	SPDT	On-Off-On*	2.10	1.54	1.40
138-JMT134	SPDT	On-On*	1.95	1.43	1.30
138-JMT221	DPDT	On-Off-On	2.55	1.87	1.70
138-JMT223	DPDT	On-On	2.15	1.58	1.43
138-JMT227	DPDT	On*-Off-On*	2.70	1.98	1.80
138-JMT231	DPDT	On-Off-On*	2.70	1.98	1.80
138-JMT234	DPDT	On-On*	2.55	1.87	1.70
138-JMT321	3PDT	On-Off-On	4.25	3.12	2.84
138-JMT323	3PDT	On-On	3.85	2.82	2.57
138-JMT421	4PDT	On-Off-On	5.45	4.00	3.64
138-JMT423	4PDT	On-On	4.85	3.56	3.24

*Momentary Position

ARROW-HART SWITCHES

NEW MIDGET TOGGLE SWITCHES



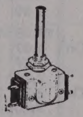
3 AMPS 125 VOLTS WITH CHOICE OF LEVERS

This new series of toggle switches gives a choice of Metal Bat lever, Metal Paddle lever with satin chrome finish or Black Nylon lever. Rated at 1A., 250V., 3A., 125V. Molded phenolic base. Nickel finished exposed parts. Knife blade contacts. Back wired solder lug terminals. Sleeve diameter 15/32"-32. Size: 1-1/32" x 41/64" x 53/64" high. *Supplied with Hex Nut and Knurled Nut. **Supplied with Hex Nut and Dress Nut.

Cat. No.	Type Lever	Circuit	Sleeve Length	Net 1-99	100-499	500-999
143-83050*	Bat	SPST	15/32"	$1.54	$0.77	$0.62
143-83052*	Bat	SPDT	15/32"	1.84	.92	.74
143-83053*	Bat	DPST	15/32"	2.28	1.14	.91
143-83054*	Bat	DPDT	15/32"	2.62	1.31	1.05
143-83050-SB**	Nylon	SPST	15/32"	1.85	.93	.74
143-83052-SG**	Nylon	SPDT	15/32"	2.59	1.29	1.04
143-83053-SG**	Nylon	DPST	15/32"	2.59	1.29	1.04
143-83054-SQ**	Nylon	DPDT	15/32"	2.93	1.46	1.17
143-83052-CG**	Paddle	SPDT	15/32"	2.54	1.27	1.02
143-83053-CG**	Paddle	DPST	15/32"	2.98	1.49	1.19
143-83054-C**	Paddle	DPDT	15/32"	3.38	1.69	1.35

ROTARY SWITCHES

6 AMP 125V AC-DC



SPST 2 position-maintained contact. Wiping contacts. Molded phenolic base. Nickel finished exposed parts. Solder lug terminals. Sleeve diameter 11/32"-32. Rated at 3A., 250V., 6A., 125V. Spindle Dia. ¼" Supplied with 2 Hex nuts.

Cat. No.	Sleeve Length	Spindle Projection	Net 1-99	100-499	500-999
143-81715	3/8"	3/8"	$2.83	$1.41	$1.13
143-81715-J	3/8"	1-1/8"	2.83	1.41	1.13

MIDGET SIZE PUSH SWITCHES

MOMENTARY SLOW MAKE & BREAK

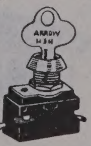
Molded Phenolic Base. Slotted Sleeve (15/32" dia. 32 threads per inch, 9/16" Long) Rated 3A, 120VAC., 1/10 HP 120 VAC. One hex nut and one knurled nut assembled. Sleeve, nuts and standard metal button are aluminum. Solder lugs.

Cat.	Circuit	Net 1-99	100-499	500-999
143-80511	SPST Normally Closed	$.87	$.43	$.35
143-80511-E	SPST Normally Open	.87	.43	.35

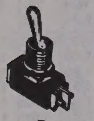
ROTO-POWER—LOCK TYPE

Ratings: SPST 3A, 250V; 6A, 125V AC-DC. SPDT 1A, 250V; 6A, 125V AC-DC. 15/32" sleeve. Solder lugs.

Cat.	Action	Key Removes	Net 1-99	100-499	500-999
143-81715-L	SPST	Off Pos.	$3.61	$1.80	$1.44
143-81721-L	SPDT	Both Pos.	3.81	1.90	1.52



ARROW-HART SWITCHES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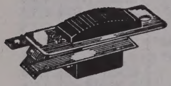
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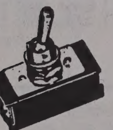
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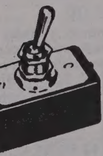
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3 AMPS 125 VOLTS
WITH BAT LEVER (B)

For small radios, electronic devices, appliances, etc. Underwriters' approved for 3 amps at 125 volts. Laminated bakelite base insulation. Nickeled sleeve is 15/32" dia. mounts in ½" dia. hole. Solder lug terminals. Base Size: (LWH): †1-3/16" x ½" x 35/64"; ‡1-9/16" x ½" x 35/64"; §1-9/16" x 21/32" x 35.64"; #1-9/16" x 21/32" x 29/32".

Cat. No.	Action	Neck L	Net 1-99	10-24	25-49
143-20994-LH†	SP-ST	15/32"	$1.24	$0.62	$0.50
143-21350-EH‡	SP-DT	15/32"	1.56	.78	.63
143-20902-CX§	DP-ST	15/32"	2.25	1.13	.90
143-20905-FR#	DP-DT	15/32"	2.58	1.49	1.13

6 AMPS 125 VOLTS
MOLDED PHENOLIC BASE (C)

Underwriters' approved for 6 amps at 125 volts, or 3 amps at 250 volts. *Rated at 1 amp at 250 volts. Molded phenolic case with back-connected solder lug terminals. Nickeled sleeve is 15/32" dia., fits ½" dia. mounting hole. Base Size: (LWH): †1¼" x 11/16" x 15/16"; ‡1-13/32" x 11/16" x 1-1/16"; §1-13/16" x 11/16" x 1-1/16".*Momentary Action.

2-POSITION MAINTAINED

Cat. No.	Action	Neck L	Net 1-99	100-499	500-999
143-81015-AW†	SP-ST	15/32"	$1.54	$0.77	$0.62
143-81021-AV*†	SP-DT	15/32"	1.84	.92	.74
143-81024-GB†	DP-ST	15/32"	2.28	1.14	.91
143-81027-CE†	DP-DT	15/32"	2.62	1.31	1.05

3-POSITION, NEUTRAL CENTER

143-82022-HD‡	SPDT	15/32"	$2.97	$1.48	$1.19
143-82024-HD‡	DPDT	15/32"	3.66	1.83	1.46

10 AMPS 250 VOLTS
MOLDED PHENOLIC BASE (D)

Bat lever—2 and 3 position—Slotted Sleeve (15/32" dia. 32 threads per inch). One hex nut and one knurled nut and terminal screws. Rated 10A at 250 VAC or 15A at 125VAC ¾ HP 120-240VAC. Screw terminals.

Cat. No.	Action	Circuit	Net 1-99	100-499	500-999
143-82600	SPST	On-Off	$1.39	$0.70	$0.57
143-82602	SPDT	On-Off-On	1.67	.84	.67
143-82604	SPDT	On-On	1.67	.84	.67
143-82606	DPST	On-Off	2.24	1.12	.90
143-82608	DPDT	On-Off-On	2.76	1.38	1.10
143-82610	DPDT	On-On	2.76	1.38	1.10

MIDGET SLIDE LEVER (F)

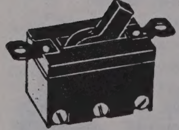
Molded phenolic base and lever. SPST. Rated 3A at 250V, 6A 125V AC-DC. Binding screw contacts. 2-3/16" x 3/4".

143-81569	$2.34	$1.27	$0.94

ON-OFF PLATE

For use with 15/32" sleeve toggle switches Vertica positioning. Keyed to proper location.

143-20590-1	On-Off Plate	$0.07	$0.06	$0.05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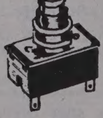
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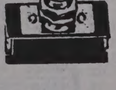

M

15 AMPS 125 VOLTS
FAST MAKE & BREAK (G)

Underwriters' approved for 15 amps at 125 volts, 10 amps at 250 volts, 1½ HP at 250 v-dc, or 1 HP at 240 v-ac. Molded phenolic base is 2" x 1" x 7/8" high. Nickeled sleeve is 15/32" dia., 11/32" long mounts in ½" dia. hole. Screw terminals. Bat lever.

Cat. No.	Action	Net 1-99	100-499	500-999
143-80601-BD	SP-ST	$4.08	$2.04	$1.63
143-80609-CA	SP-DT	4.08	2.04	1.63
143-80602-CA	DP-ST	4.08	2.04	1.63

20 AMPS 250 VOLTS (H)

Handles 1½ HP at 250 volts. Molded base is 2¼" x 1-1/8" x 1-5/32" high. 15/32" dia. sleeve is 11/32" long. Ball lever type.

143-80421	DP-ST	$5.48	$2.74	$2.19

NEUTRAL CENTER
10 AMPS 125 VOLTS (I)

Fast-break contacts reduce arcing. Rated 10 amps 125 volts, 5 amps 250 volts, ¾ HP at 250 volts. Base size 2" x 1-5/16" x 1" high. Nickeled sleeve ¾" dia., 13/32" long. Screw terminals.

Cat. No.	Action	Net 1-99	100-499	500-999
143-80638-D	DP-DT	$6.80	$3.40	$2.72
143-80983	3PDT	10.50	5.25	4.20
143-80985	4PDT	14.01	7.00	5.60

20 AMPS 125 VOLTS (J)

Rated 10 amps at 250 volts, 5 amps at 600 volts, 1½ HP at 250 volts. Molded phenolic base 2½" x 1-19/32" x 1-21/32" high. 3-9/32" mtg. ctrs. Mounts in standard switch box. DP-DT action, center off.

143-80634	DP-DT	10.94	$5.47	$4.38

PUSH BUTTON SWITCHES

Momentary types are "on" when button is pushed. Other types are alternately "on" or "off." 15/32" sleeves. Base Size (LWH); †1¼" x 11/16" x 15/16"; ‡1¾" x 13/16" x 25/32"; §1-1/8" x ½" x 9/16"; #1¾" x 1-3/32" x 25/32".

MOMENTARY CONTACT, 6A @ 125V. (L)

Cat. No.	Action	Neck L	Net 1-99	100-499	500-999
143-81081-G†	SP-DT	½"	$3.21	$1.60	$1.28
143-81084-G†	DP-ST	½"	3.85	1.93	1.54
143-81087-J†	DP-DT	½"	4.16	2.08	1.66

MOMENTARY CONTACT, 12A @ 125 V. (M)

143-80630‡	DP-ST	7/16"	3.48	1.74	1.39

PUSH-ON, PUSH-OFF, 6A @ 125 V. (K)

143-82403§	SP-ST	9/16"	1.77	.88	.71

PUSH-ON, PUSH-OFF, 16A @ 125 V. (M)

143-80863#	DP-ST	15/32"	3.62	1.81	1.45

MOMENTARY PUSH BUTTON
1-MAKE, 1-BREAK ACTION
RATED 1 AMP 125 V-AC (E)

Underwriters' approved. Spring return action. Sleeve length 7/16", dia. 15/32". Base Size: 1-19/32" x 15/32" x 17/32" high. Available with red or black button.

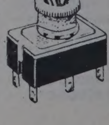
Cat.	Color	1-99	100-499	500-999
143-3392-AE	Black	$2.13	$1.06	$0.85
143-3392-AER	Red	2.13	1.06	.85

NEW 84000 SERIES
5 AMPS 125 VOLTS WITH BAT HANDLE

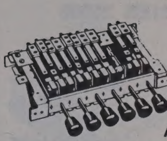
Molded black phenolic bakelite base measures only 49/64" x 1-13/64" x 59/64" high. Rated at 5 A, 125 VAC or 2A, 250VAC and 4A, 125VDC or 1A, 250 VDC. Silver plated contacts are standard. *Indicates momentary position. †UL Listed.

MAINTAINED CONTACTS

Cat. 143-★	Circuits	Action	Net 1-99
84104	DPDT	On-Off-On	$4.24
84105	SPDT	On-Off-On	3.56
84222†	3-CIR	On-On-On	4.53



SWITCHCRAFT MULTISWITCHES®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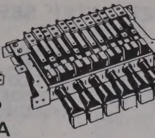

B

MULTI-STATION PUSH-BUTTON SWITCHES

Basic, design simplicity provides a unique multiple station pushbutton switch that's rugged, compact, versatile and completely flexible in switching operations. The units listed below are standard, but hundreds of combinations are possible as all switching components; frame, switch stacks, lamps and other accessories are changeable. **Interlock** restores to normal any previously actuated station when another station is actuated. **Lock-Out** when combined with interlock prevents the operation of more than pushbutton at a time. **Non-Lock** is momentary action of each station. **All-Lock** is accumultative locking of all stations with restoration of all stations to normal when release station is depressed. **Push-Lock/Push-Release** pushbutton locks when depressed and is released when again depressed.

SERIES 7000 NON-ILLUMINATED SWITCHES (A)

Mounts on panels up to .375" thick, maximum depth behind panel 3.312". End mounting brackets have four 8-32 tapped holes. Pushbutton center-to-center .625". Furnished with round, brown pushbuttons for each station, plus extra red button for use when switch requires a release station. Under stations § indicates contact form per station.

		Interlock w/Lock-Out		Non-Lock	All-Lock		Push-Lock/ Push-Release	
Stations No.	§	Cat. 223-★	Ea. 1-9	Cat. 223-★	Cat. 223-★	Ea. 1-9	Cat. 223-★	Ea. 1-9
2	2-C	7200K-606	$10.95	7202-606	7203-606	$ 8.81	7207-606	$ 9.69
4	2-C	7400K-606	16.38	7402-606	7403-606	14.04	7407-606	15.44
6	2-C	7600K-606	22.13	7602-606	7603-606	19.63	7607-606	21.58
8	2-C	7800K-606	27.92	7802-606	7803-606	25.22	7807-606	27.76
10	2-C	71000K-606	33.87	71002-606	71003-606	30.81	71007-606	33.90
12	2-C	71200K-606	39.81	71202-606	71203-606	36.40	71207-606	40.04
2	4-C	7200K-612	13.68	7202-612	7203-612	11.54	7207-612	12.68
4	4-C	7400K-612	21.84	7402-612	7403-612	19.50	7407-612	21.45
6	4-C	7600K-612	30.32	7602-612	7603-612	27.82	7607-612	30.58
8	4-C	7800K-612	38.84	7802-612	7803-612	36.14	7807-612	39.78
10	4-C	71000K-612	47.52	71002-612	71003-612	44.46	71007-612	48.91
12	4-C	71200K-612	56.19	71202-612	71203-612	52.78	71207-612	58.08

SERIES 2100 ILLUMINATED SWITCHES (B)

Similar in switching functions and characteristics to 7000 Series above. Square pushbuttons with bright front and side illumination. Buttons light in "In" position. Lamps (6-v or 28-v) are easy front-of-panel replaceable. Switch contacts (both 7000 and 2100 Series) are crossbar palladium rated at 3 amps., 300 watts max., non-inductive a-c.

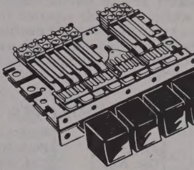
2	2-C	21200K-506	$15.24	21202-506	21203-506	$13.10	21207-506	$14.43
4	2-C	21400K-506	25.32	21402-506	21403-506	22.98	21407-506	25.32
6	2-C	21600K-506	35.36	21602-506	21603-506	32.86	21607-506	36.14
8	2-C	21800K-506	45.47	21802-506	21803-506	42.77	21807-506	47.06
10	2-C	211000K-506	56.03	211002-506	211003-506	52.98	211007-506	58.27
12	2-C	211200K-506	66.27	211202-506	211203-506	62.86	211207-506	69.16
2	4-C	21200K-512	17.97	21202-512	21203-512	15.83	21207-512	17.42
4	4-C	21400K-512	30.78	21402-512	21403-512	28.44	21407-512	31.30
6	4-C	21600K-512	43.55	21602-512	21603-512	41.05	21607-512	45.18
8	4-C	21800K-512	56.39	21802-512	21803-512	53.69	21807-512	59.74
10	4-C	211000K-512	69.68	211002-512	211003-512	66.63	211007-512	73.29
12	4-C	211200K-512	82.65	211202-512	211202-512	79.24	212007-512	87.17

SERIES 35000 NON-ILLUMINATED SWITCHES (C)

		Interlock w/Lock-Out	Non-Lock	All-Lock	Push-Lock/ Push-Release	
Stations No.	§	Cat. 223-★	Cat. 223-★	Cat. 223-★	Cat. 223-★	Ea. 1-9
2	2-C	35021K-206	35022-206	35023-206	35027-206	$ 8.26
4	2-C	35041K-206	35042-206	35043-206	35047-206	13.26
6	2-C	35061K-206	35062-206	35063-206	35067-206	18.59
8	2-C	35081K-206	35082-206	35083-206	35087-206	23.92
10	2-C	35101K-206	35102-206	35103-206	35107-206	29.25
12	2-C	35121K-206	35122-206	35123-206	35127-206	34.58
2	4-C	35021K-212	35022-212	35023-212	35027-212	10.99
4	4-C	35041K-212	35042-212	35043-212	35047-212	18.72
6	4-C	35061K-212	35062-212	35063-212	35067-212	26.78
8	4-C	35081K-212	35082-212	35083-212	35087-212	34.84
10	4-C	35101K-212	35102-212	35103-212	35017-212	42.90
12	4-C	35121K-212	35122-212	35123-212	35127-212	50.96

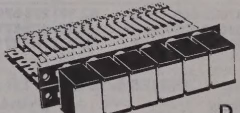
SERIES 37000 ILLUMINATED SWITCHES (D)

2	2-C	37021K-1206	37022-1206	37023-1206	37027-1206	$13.07
4	2-C	37041K-1206	37042-1206	37043-1206	37047-1206	23.21
6	2-C	37061K-1206	37062-1206	37063-1206	37067-1206	33.35
8	2-C	37081K-1206	37082-1206	37083-1206	37087-1206	43.81
10	2-C	37101K-1206	37102-1206	37103-1206	37107-1206	53.95
12	2-C	37121K-1206	37122-1206	37123-1206	37127-1206	64.09
2	4-C	37021K-1212	37022-1212	37023-1212	37027-1212	15.80
4	4-C	37041K-1212	37042-1212	37043-1212	37047-1212	28.67
6	4-C	37061K-1212	37062-1212	37063-1212	37067-1212	41.54
8	4-C	37081K-1212	37082-1212	37083-1212	37087-1212	54.73
10	4-C	37101K-1212	37102-1212	37103-1212	37107-1212	67.60
12	4-C	37121K-1212	37122-1212	37123-1212	37127-1212	80.47


C

SERIES 35000 (C)

Mounts on panels up to .125" thick, overall behind panel 2.312". Narrow silhouette permits stacking on .750" centers. Pushbuttons are on .625" centers. Furnished with square black pushbuttons, plus a red button for use when switch has momentary release button. Under stations § indicates contact form per station.

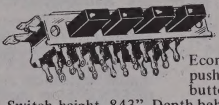

D

SERIES 37000 (D)

Identical in switching functions and characteristics to Series 35000, but features large rectangular shaped pushbuttons which serve as a color or legend coded panel indicator light which actuates switches. Pushbuttons may be hot-stamped or engraved. Pushbuttons light on "In" position. Lamps (6-v or 28-v) may be changed from front-of-panel.

ACCESSORIES

Such as additional switch stacks, solenoid release, color filter inserts, lamps, etc., are available for use with the Multi-Station Pushbutton Switches. Descriptive information, price and delivery will be quoted on request.



"DW" MULTI-SWITCH

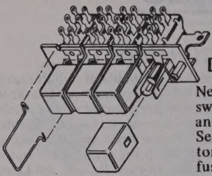
Economy type multi-station pushbutton switches. Black buttons on .625" centers. Switch height .843". Depth behind panel: 2-C Models-1.062"; 4-C Models 1.937". Current rating 3 amps a-c, non-inductive.

		Interlock w/Lock-Out	All-Lock	Push-Lock/ Push-Release	
Stations No.	§	Cat. 223-★	Cat. 223-★	Cat. 223-★	Ea. 1-24
2	2-C	65021K-206	65023-206	65027-206	$1.68
4	2-C	65041K-206	65043-206	65047-206	3.00
6	2-C	65061K-206	65063-206	65067-206	4.32
8	2-C	65081K-206	65083-206	65087-206	5.64
10	2-C	65101K-206	65103-206	65107-206	6.93
12	2-C	65121K-206	65123-206	65127-206	8.25
2	4-C	65021K-212	65023-212	65027-212	1.98
4	4-C	65041K-212	65043-212	65047-212	3.60
6	4-C	65061K-212	65063-212	65067-212	5.22
8	4-C	65081K-212	65083-212	65087-212	6.84
10	4-C	65101K-212	65103-212	65107-212	8.43
12	4-C	65121K-212	65123-212	65127-212	10.05

Quantity prices are available for all Switchcraft Products and will be furnished on request.

★Be sure to include entire Cat. No. when ordering.

SWITCHCRAFT



SERIES 67000 DW "MULTI-SWITCH"®

New illuminated DW "Multi-Switch"® switches retain all quality construction and reliable switching of Series 65000. Series 67000 has large square pushbutton, providing brilliant, evenly-diffused lighting. Standard white pushbuttons easily snap-off actuators for simple front-of-panel relamping. Lamp sockets, at each station, accept a single 6V and/or 28V lamp. Lamp socket terminals separate from switching terminals. Switch mounts with only two #6-32 machine screws (not furnished). Two #6-32 tapped studs (stand offs) are interral with the frame and are used to provide proper positioning of the switches. Depth behind panel 1½" (2-C switching); 2-3/8" (4-C switching); 1-1/16" high.

SERIES 67000/2-C PER STATION

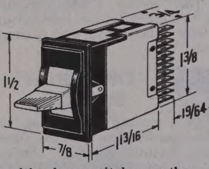
Interlock/ Lock-Out Cat. No.	All-Lock Cat. No.	Push-Lock/ Push-Release Cat. No.	No. of Stations	Net 1-24
223-67021K-506	223-67023-506	223-67027-506	2	$2.22
223-67041K-506	223-67043-506	223-67047-506	4	4.02
223-67061K-506	223-67063-506	223-67067-506	6	5.82
223-67081K-506	223-67083-506	223-67087-506	8	7.62
223-67101K-506	223-67103-506	223-67107-506	10	9.42
223-67121K-506	223-67123-506	223-67127-506	12	11.22

Non-Lock Cat. No.	No. of Stations	Net 1-24	Non-Lock Cat. No.	No. of Stations	Net 1-24
223-67022-506	2	$2.19	223-67082-506	8	$6.90
223-67042-506	4	3.66	223-67102-506	10	8.52
223-67062-506	6	5.28	223-67122-506	12	10.14

SERIES 67000/4-C PER STATION

Interlock/ Lock-Out Cat. No.	All-Lock Cat. No.	Push-Lock/ Push-Release Cat. No.	No. of Stations	Net 1-24
223-67021K-512	223-67023-512	223-67027-512	2	$2.52
223-67041K-512	223-67043-512	223-67047-512	4	4.62
223-67061K-512	223-67063-512	223-67067-512	6	6.72
223-67081K-512	223-67083-512	223-67087-512	8	8.82
223-67101K-512	223-67103-512	223-67107-512	10	10.92
223-67121K-512	223-67123-512	223-67127-512	12	13.02

Non-Lock Cat. No.	No. of Stations	Net 1-24	Non-Lock Cat. No.	No. of Stations	Net 1-24
223-67022-512	2	$2.19	223-67082-512	8	$8.10
223-67042-512	4	4.26	223-67102-512	10	10.02
223-67062-512	6	6.18	223-67122-512	12	11.94



SWITCHCRAFT "LEVER-LITE" III 84000 SWITCHES

Multi-colored, illuminated Series 84000 Lever Switches with changeable color tabs. Two-position lever switches are AMBER colored in central or neutral position, and GREEN in down position. Three-position lever switches are the same, with RED color in the up position. Action is non-locking, or momentary contact. For locking contact action add suffix "L" to Cat. No. Contact rating 2 amps non-inductive load.

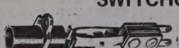
2-POSITION TYPES

Cat. No.	Switch Action	Ea. 1-24	25-49	50-99	100-249
223-84206	DP-DT	$5.10	$4.68	$4.25	$3.40
223-84212	4P-DT	6.30	5.78	5.25	4.20

3-POSITION TYPES

Cat. No.	Switch Action	Ea. 1-24	25-49	50-99	100-249
223-84306	SP-DT Ea. Sec.	$5.10	$4.68	$4.25	$3.40
223-84312	DP-DT Ea. Sec.	6.30	5.78	5.25	4.20
223-84324	4P-DT Ea. Sec.	8.70	7.98	7.25	5.80

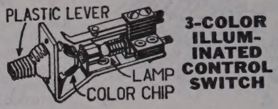
SWITCHCRAFT LAMP JAX

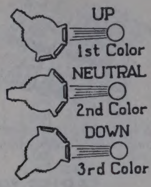


Same as W.E. #47A and #47B. Accepts standard switchboard lamps and lamp caps such as W.E. #2 and #72. Molded black nylon sleeve insulates lamp. Sleeve dia. .447". Depth behind panel 2.875". Long springs for constant contact pressure. Insulator prevents inserting lamp too far.

Cat. 223-LT-47	"Lamp Jax"	Net Ea. $0.90

"LEVER-LITE" SERIES 25000





Moving the translucent plastic lever up or down positions a color tab through which a miniature t-1¾ screw-base 6-volt lamp projects illumination into the lever, causing it to glow with the tab color. Furnished with color tabs for blue, red, amber, yellow, green and white. Tabs are easily inserted or changed. Silver contacts rated 3 amps, 300 watts max., non-inductive a-c loads. Size: 2¼" long, 39/64" wide, 1-7/32" high. Mounts on panels up to 3/32" thick. *Each section.

2-POSITION TYPES

Non-Lock Cat. No.	Locking Cat. No.	Action	Forms P-1	Forms P-2	Ea. 1-24	25-49	50-99
223-25201	223-25201L	SP-ST-NO		1-A	$2.91	$2.67	$2.43
223-25203	223-25203L	SP-DT		1-C	3.09	2.83	2.58
223-25206	223-25206L	DP-DT		2-C	3.63	3.33	3.03
223-25209	223-25209L	3P-DT		3-C	4.17	3.82	3.48

3-POSITION TYPES

Non-Lock Cat. No.	Locking Cat. No.	Action	Forms P-1	Forms P-2	Ea. 1-24	25-49	50-99
223-25304	223-25304L	SP-ST-NO*	1-A	1-A	3.30	3.03	2.75
223-25306	223-25306L	SP-DT*	1-C	1-C	3.63	3.33	3.03
223-25308	223-25308L	DP-ST-NO*	2-A	2-A	4.02	3.69	3.35
223-25312	223-25312L	DP-DT*	2-C	2-C	4.35	3.99	3.63

"LEVER-LITE" SERIES 27000

Similar to Series 25000 above but with a larger, contoured lever and factory installed color tabs. On 2-Position types NEUTRAL is AMBER, DOWN is GREEN. On 3-Position types UP is RED, NEUTRAL is AMBER, and DOWN is GREEN. Supplied with a 6 volt lamp. *Each section. †Normally open (NO) position OFF

2-POSITION TYPES

Non-Lock Cat. No.	Locking Cat. No.	Action	Forms P-1	Forms P-2	Ea. 1-24	25-49	50 9
223-27206	223-27206L	DP-DT		2-C	$4.74	$4.35	$3.9
223-27212	223-27212L	4P-DT		4-C	5.82	5.34	4.8

3-POSITION TYPES

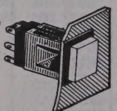
Non-Lock Cat. No.	Locking Cat. No.	Action	Forms P-1	Forms P-2	Ea. 1-24	25-49	50 9
223-27306	223-27306L	SP-DT*	1-C	1-C	4.74	4.35	3.9
223-27307	223-27307L	SP-DT-NO*	1-C†	1-C†	4.83	4.43	4.0
223-27312	223-27312L	DP-DT*	2-C	2-C	5.82	5.34	4.8

LAMPS FOR 25,000/27,000 SERIES

223-P-1217	6-volt, screw base	.81	.74	.6
223-P-1218	28-volt, screw base	1.20	1.10	1.0

ESCUTCHEON PLATES

223-531	For 25,000 Series, with screws	.15	.138	.12
223-532	For 27,000 Series, with screws	.21	.193	.17



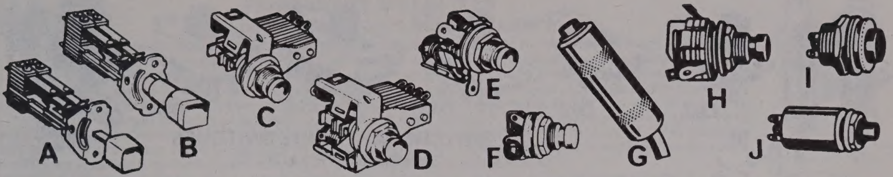
NEW BOX SWITCH

Miniature, momentary action, push-butto switch offers broad switching capabilities i minimum panel space. 11/16" square switch r quires 55/64" min. to 1-5/64" max. depth b hind panel. Molded plastic body protects agains damaging dust and dirt and prevents bendin or disfiguring of contacts caused by excessive handling. Attractiv bezel frames pushbutton and acts as built-in escutcheon plat Unique "Adjusto-Clips" provide snap-in, front of panel, moun ing in panels from 3/64" to 17/64" thick in .615" sq. holes. Re black, green, or white pushbuttons. 7/64" button stroke. Integr slide contacts of special spring tempered phosphor bronze, silv plated, rated at 250 ma., 30 watts max., A.C. non-inductive loa Evenly spaced solder lug terminals are clearly identified for ease wiring.

Cat. No.	Contact Action	Net 1-24	25-49	5 9
223-BX-(*)-1	SP-ST-NO	$2.07	$1.90	$1.7
223-BX-(*)-3	SP-DT	2.16	1.98	1.8
223-BX-(*)-6	DP-DT	2.37	2.17	1.9
223-BX-(*)-10	DP-DT-DP-ST-NO	2.70	2.48	2.2

*Insert number of color desired: (01) red; (02) Black; (03) Gree (05) White. For example a SP-DT switch with green button wou be 223-BX-03-3. N.O. means normally open.

SWITCHCRAFT



"PUSH-PUSH" SWITCHES

With alternate push-to-lock and push-to-release, or momentary non-lock operation. Welded cross-bar palladium contacts rated 3 amps, 300 watts max., non-inductive a-c loads. Mounts with two 3-48 screws on 5/8" centers. Depth behind panel 2-7/8". Series 5000 supplied with square, brown button. Series 15000 with square buttons for front and side illumination. Less lamp.

NON-ILLUMINATED SERIES 5000 (A)

Non-Lock Cat. No.	Locking Cat. No.	Action	Circuit	Ea. 1-24	25-49	50-99
223-5006	223-5006L	DP-DT	2-C	$4.32	$3.96	$3.60
223-5012	223-5012L	4P-DT	4-C	5.76	5.28	4.80

ILLUMINATED SERIES 15000 (B)

Non-Lock Cat. No.	Locking Cat. No.	Action	Circuit	Ea. 1-24	25-49	50-99
223-15003	223-15003L	SP-DT	1-C	$5.43	$4.98	$4.53
223-15012	223-15012L	4P-DT	4-C	7.32	6.71	6.10

"NF-LITE" ILLUMINATED
PUSH-BUTTON SWITCHES

Provide multiple-pole, momentary contact. Light from lamp is filtered through color chip to clear plastic push-button. Color chips easily changed. Ideal for control panel or press-to-test applications. Isolated lighting and switching circuits. Silver contacts rated 3 amps, 300 watts max., non-inductive a-c loads. Mount in 3/8" hole on up to ¼" thick panels. Max. depth 1-5/16".

SERIES 4100 (C)

Uses one 6-volts or 28-volts lamp. Furnished with one each of red, amber, green and yellow color chips. Less lamp.

Cat. No.	Action	Circuit	Ea. 1-24	25-49	50-99	100-249
223-4106	DP-DT	2-C	$1.65	$1.51	$1.38	$1.10
223-4109	3P-DT	3-C	2.13	1.95	1.78	1.42

SERIES 4200 (D)

Uses two 6-volts or 28-volt lamps for greater illumination or two color operation. Furnished with two each of red, amber, green and yellow color chips. Less lamps.

Cat. No.	Action	Circuit	Ea. 1-24	25-49	50-99	100-249
223-4206	DP-DT	2-C	$2.34	$2.15	$1.95	$1.56
223-4209	3P-DT	3-C	2.70	2.48	2.25	1.80

"LITTEL-LITE" ILLUMINATED (E)
PUSH-BUTTON SWITCHES

Momentary contact action. Ideal for limited space and press-to-test applications. One-piece, clear plastic button and shaft is illuminated by a 6-volts or 28-volt lamp. Includes kit of four color chips. Nickel-silver contacts. Mounts in 3/8" hole on panels up to ¼" thick. Overall depth 1-3/16". Less lamp.

Cat. No.	Action	Circuit	Ea. 1-24	25-49	50-99	100-249
223-211	SP-ST-NO	1-A	$1.17	$1.07	$.975	$.78
223-213	SP-DT	1-C	1.44	1.32	1.20	.96
223-211S*	SP-ST-NO	1-A	1.35	1.24	1.13	.90
223-213S*	SP-DT	1-C	1.59	1.46	1.33	1.06

*With 3-amp silver contacts rated non-inductive a-c loads.

NEW UNISWITCHES
ONLY 11/16" SQUARE

Mounts in either of two planes or in matrices and requires only 1-3/64" min. to 1-17/64" max. depth behind panel. Both types have 1-A circuit. Contact terminals are brass, silver plated. Contacts rated at 250ma., 30 watts. max., A.C. non-inductive load. Pushbuttons have ½" squ. concave face. Furnished with special "Adjusto-Clip" for fast snap-lock installation. For more info ask for Switchcraft Bulletin No. 181. *Less lamp.

Cat.	Description	1-24	25-49	50-99
223-LUS-05-1*	Illuminated "Uniswitch"	$1.14	$1.05	$.95
223-US-05-1	Non-illuminated "Uniswitch"	.90	.825	.75
223-P-2290	6v. Bi-pin lamp for LUS-05-1	.96	.88	.80

"TINY SWITCHES" (F)

Sub-miniature, momentary contact, push-button switches for low level circuits where space is limited. Mounts in ¼" hole on panels up to 3/32" thick. Depth 3/8". *Button color.

Red* Cat. No.	Black* Cat. No.	Action	Circuit	Ea. 1-24	25-49	50-99
223-951	223-961	SP-ST-NO	1-A	$.63	$.578	$.525
223-952	223-962	SP-ST-NC	1-B	.63	.578	.525
223-953	223-963	SP-DT	1-C	.75	.688	.625

"CORD SWITCHES" (G)

Metal enclosed, momentary contact push-button switches for cord or pendant use. Sleeve dia. 11/16", length 2-3/16". *Button.

Red* Cat. No.	Black* Cat. No.	Action	Cir cuit	Ea. 1-24	25-49	50-99
223-E-903	223-E-913	SP-DT	1-C	$1.50	$1.38	$1.25

"LITTEL-SWITCHES" (H)

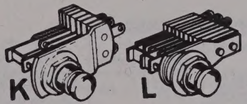
Tiny, momentary contact, push-button switches. †With nickel-silver springs for low level circuits. ‡ With silver contacts, rated 3 amps or 300 watts max., a-c non-inductive loads. Mounts in 3/8" hole on panels up to ¼" thick. *Button color.

Red* Cat. No.	Black* Cat. No.	Action	Cir cuit	Ea. 1-24	25-49	50-99
223-101†	223-201†	SP-ST-NO	1-A	$.63	$.578	$.525
223-101S‡	223-201S‡	SP-ST-NO	1-A	.81	.743	.675
223-102†	223-202†	SP-ST-NC	1-B	.63	.578	.525
223-102S‡	223-202S‡	SP-ST-NC	1-B	.81	.743	.675
223-103†	223-203†	SP-DT	1-C	.75	.688	.625
223-103S‡	223-203S‡	SP-DT	1-C	.93	.853	.775

"BUTTON SWITCHES"

Small, momentary contact, push-button switches in metal housings. Fig. I mounts in 15/32" hole on panels up to 19/64" thick. Fig. J mounts in ¼" hole on panels up to 5/32" thick. Current rating ¼ amp. non-inductive a-c loads. *Button color.

Red* Cat. No.	Black* Cat. No.	See Fig.	Action	Circuit	Ea. 1-24	25-49	50-99
223-903	223-913	I	SP-DT	1-C	$.93	$.853	$.775
223-903D	223-913D	I	SP-DT	1-D	.93	.853	.775
223-923	223-933	J	SP-DT	1-C	.99	.908	.825
223-923D	223-933D	J	SP-DT	1-D	.99	.908	.825

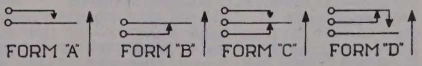


FLAT FRAME
NON-LOCKING

Flat frame construction for minimum depth behind panel. Silver contacts rated 3 amps non-inductive a-c loads. Fig. K mounts in 3/8" hole on panels up to ¼" thick. Fig. L is ½" wide, 1-5/8" long, mounts in 3/8" hole on panels up to 5/32" thick.

"K" Cat. No.	"L" Cat. No.	Action	Cir cuit	Ea. 1-24	25-49	50-99
223-1001	223-4001	SP-ST-NO	1-A	$.84	$.77	$.70
223-1003	223-4003	SP-DT	1-C	.93	.853	.775
223-1004	223-4004	DP-ST-NO	2-A	1.02	.935	.85
223-1006	223-4006	DP-DT	2-C	1.17	1.07	.975
223-1009	223-4009	3P-DT	3-C	1.68	1.54	1.40

BASIC SCHEMATIC CIRCUITS



SLIDE SWITCHES

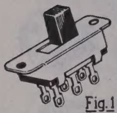


Fig. 1

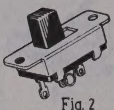


Fig. 2

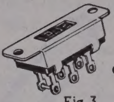


Fig. 3

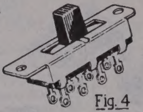


Fig. 4

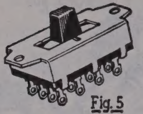


Fig. 5

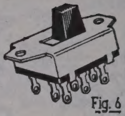


Fig. 6

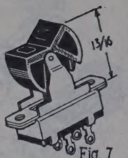
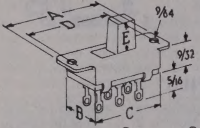


Fig. 7

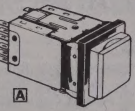


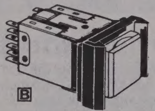
SWITCHCRAFT SLIDE SWITCHES

"DOUBLE-WIPE" ACTION

Special "slider" assure a continuous wiping action which is self-cleaning. This reduces the possibility of oxidization and increased contact resistance. Housings are cold-rolled steel, cadmium plated. Deten shim is nickel silver. Molded black plastic knob. Terminals are brass, silver plated. Slider contactors are special brass alloy, silver plated. Insulation is XXXP paper base phenolic. *Non-inductive.

Cat. No.	See Fig.	Switch Action	Current Rating*	Size In Inches					Ea. 1-24	25-49	50-99	100-249	250-499	500-99
				A	B	C	D	E						
223-46202LR	1	SP-ST Locking	0.5 A-DC, 3.0 A-AC @ 125 V.	1-3/8	17/32	7/8	1-1/8	11/32	$.21	$.193	$.175	$.14	$.133	$.12
223-46203LR	1	SP-DT Locking							.24	.22	.20	.16	.152	.14
223-46203LSR	1	SP-DT Locking							.27	.248	.225	.18	.171	.16
223-46203MR	2	SP-DT Momentary							.39	.358	.325	.26	.247	.23
223-46204LR	1	DP-ST Locking	0.5 A-DC, 3.0 A-AC @ 125 V.	1-3/8	17/32	7/8	1-1/8	11/32	.27	.248	.225	.18	.171	.16
223-46206LR	1	DP-DT Locking							.30	.275	.25	.20	.19	.18
223-46206LFR	3	DP-DT Locking							.39	.358	.325	.26	.247	.23
223-46311LDR	4	SP-TT Locking							.39	.358	.325	.26	.247	.23
223-46313LDR	4	DP-TT Locking							.42	.385	.35	.28	.266	.25
223-49309L	5	3P-DT Locking	0.5 A-DC, 3.0 A-AC @ 125V.	1-21/32	25/32	1-5/32	1-13/32	1/2	.57	.523	.475	.38	.361	.34
223-49312L	5	4P-DT Locking							.60	.55	.50	.40	.38	.36
223-49329L	5	3P-TT Locking							.60	.55	.50	.40	.38	.36
223-49331L	5	4P-TT Locking							.66	.605	.55	.44	.418	.39
223-50207L	6	3P-ST Locking	0.5 A-DC, 3.0 A-AC @ 125 V.	1-3/8	25/32	7/8	1-1/8	11/32	.54	.495	.45	.36	.342	.32
223-50208L	6	4P-ST Locking							.57	.523	.475	.38	.361	.34
223-50212L	6	4P-DT Locking							.63	.578	.525	.42	.399	.37
223-51202LR	7	SP-ST Locking	0.5 A-DC, 3.0 A-AC @ 125 V.	1-3/8	17/32	7/8	1-1/8	...	.54	.495	.45	.36	.342	.32
223-51206LR	7	DP-DT Locking							.63	.578	.525	.42	.399	.37
223-52208L	7	4P-ST Locking		1-3/8	25/32	7/8	1-1/8	...	.78	.715	.65	.52	.494	.46
223-52212L	7	4P-DT Locking							.84	.77	.70	.56	.532	.50


A


B

PL "PUSH-LIGHT" SWITCHES

A completely enclosed, fully lighted push-button switch with highly reliable leaf-spring switching. Standard switches (A) have white buttons, mount in 1" x .875" cutout by means of clamp-type bracket. An accessory barrier mount (B) prevents accidental operation of adjacent switches, mounts in 1.189" cutout. Molded crossbar palladium contacts rated 2 amps., 200 watts max. a-c non-inductive. Accessory lamps are standard T-1-3/4 flange base. Furnished less lamps.

MOMENTARY ACTION

Black Housing Cat. No.	Grey Housing Cat. No.	Action	No. Lamps	Ea. 1-24	25-49
223-PL-1032-05	223-PL-4032-05	SP-DT	1	$5.55	$5.09
223-PL-1062-05	223-PL-4062-05	DP-DT	1	5.70	5.23
223-PL-1122-05	223-PL-4122-05	4P-DT	1	6.15	5.64
223-PL-2032-05	223-PL-5032-05	SP-DT	2	5.70	5.23
223-PL-2062-05	223-PL-5062-05	DP-DT	2	5.85	5.36
223-PL-2122-05	223-PL-5122-05	4P-DT	2	6.30	5.78

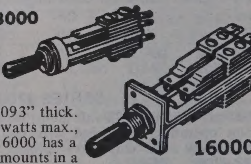
PUSH-LOCK/PUSH-RELEASE

Black Housing Cat. No.	Grey Housing Cat. No.	Action	No. Lamps	Ea. 1-24	25-49
223-PL-1037-05	223-PL-4037-05	SP-DT	1	5.85	5.36
223-PL-1067-05	223-PL-4067-05	DP-DT	1	6.00	5.50
223-PL-1127-05	223-PL-4127-05	4P-DT	1	6.45	5.91
223-PL-2037-05	223-PL-5037-05	SP-DT	2	6.45	5.91
223-PL-2067-05	223-PL-5067-05	DP-DT	2	6.60	6.05
223-PL-2127-05	223-PL-5127-05	4P-DT	2	7.05	6.45

COLOR FILTER SNAP-INSERTS

FULL-FACE				SPLIT-FACE		
Cat.	1-24	25-49	Color	Cat.	1-24	25-49
223-PL-301	$.066	$.061	Red	223-PL-401	$.048	$.044
223-PL-303	.066	.061	Green	223-PL-403	.048	.044
223-PL-304	.066	.061	Blue	223-PL-404	.048	.044
223-PL-305	.066	.061	White	223-PL-405	.048	.044
223-PL-308	.066	.061	Yellow	223-PL-408	.048	.044

LEVER SWITCHES



Series 3000 is .625" wide x 2.250" long, mounts in .500" hole on panels up to .093" thick. Current rating 3 amps, 300 watts max., a-c, non-inductive. Series 16000 has a .468"-32 threaded bushing, mounts in a .500" hole on panels up to .250" thick. †Normally open cente position. ‡ Lever locks on one side of neutral and operates non locking on other side. Black knobs are furnished. *Each section

SERIES 3000 2-POSITION

Non-Lock Cat. No.	Locking Cat. No.	Action	Form P-1 P-2	Ea. 1-24	2 4
223-3001	223-3001L	SP-ST-NO	1-A	$1.44	$1.3
223-3003	223-3003L	SP-DT	1-C	1.71	1.5
223-3004	223-3004L	DP-ST-NO	2-A	1.86	1.7
223-3006	223-3006L	DP-DT	2-C	2.07	1.9
223-3009	223-3009L	3P-DT	3-C	2.67	2.4

SERIES 3000 3-POSITION

Non-Lock Cat. No.	Locking Cat. No.	Action	Form P-1 P-2	Ea. 1-24	2 4
223-3033	223-3033L	SP-DT-NO	1-C†	1.86	1.7
223-3034	223-3034L	SP-ST-NO*	1-A 1-A	1.92	1.7
223-3036	223-3036L	SP-DT*	1-C 1-C	2.16	1.9
223-3037	223-3037L	SP-DT-NO*	1-C† 1-C†	2.22	2.0
223-30312	223-30312L	DP-DT*	2-C 2-C	2.91	2.6
223-30313	223-30313L	DP-DT-NO*	2-C† 2-C†	2.91	2.6

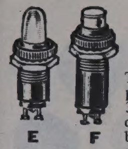
SERIES 16000 2-POSITION

Non-Lock Cat. No.	Locking Cat. No.	Action	Form P-1 P-2	Ea. 1-24	2 4
223-16006	Converts	DP-DT	2-C	3.48	3.
223-16008	to locking	4P-ST-NO	4-A	3.90	3.5
223-16009	by remov-	3P-DT	3-C	4.17	3.8
223-160012	ing stop	4P-DT	4-C	4.74	4.3
223-160024	plate.	8P-DT	8-C	6.93	6.3

SERIES 16000 3-POSITION

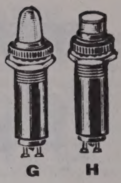
Non-Lock Cat. No.	Locking Cat. No.	Action	Form P-1 P-2	Ea. 1-24	2 4
223-16036	Converts	SP-DT*	1-C 1-C	3.48	3.
223-16038	to locking	DP-ST-NO*	2-A 2-A	3.90	3.5
223-160312	by remov-	DP-DT*	2-C 2-C	4.74	4.3
223-160316	ing stop	4P-ST-NO*	4-A 4-A	6.12	5.
223-160324	plate.	4P-DT*	4-C 4-C	6.93	6.3

DIALCO DATALITES



PERMANENT DATALITES
WITH BUILT-IN NON-REPLACEABLE LAMPS

These indicator lights incorporate an NE-2E glow lamp and are for use where it is not necessary to provide for lamp replacement. They conform to applicable requirements of Specification MIL-L-3661. Lamps consume 1/25 watt, start on 65 v-ac or 90 v-dc. Current limiting resistors are required to hold current to safe limit of 0.3 ma. Lightweight, rugged aluminum construction with black anodized finish. Molded phenolic insulation. All types mount in 3/8" dia. clearance hole by means of hex nut and lock washer. Panel space required is ½" diameter. Overall lengths: 7840 Series 1-25/64, 7841 Series 1-53/64". Tinned solder terminals. Permanently affixed lens caps are 9/32" in diameter. The cylindrical types may be obtained with up to two digits (12 pt. type) hot-stamped in black on special order. Datalites are available with stovepipe or cylindrical lenses in the colors shown below.



LESS RESISTOR

Lens	Stovepipe (E)	Cylindrical (F)
Red	331-249-7840-0931-504	331-249-7840-1431-504
Amber	331-249-7840-0933-504	331-249-7840-1433-504
White	331-249-7840-0935-504	331-249-7840-1435-504
Lt. Yellow	331-249-7840-0936-504	331-249-7840-1436-504
Clear	331-249-7840-0937-504	331-249-7840-1437-504

Datalites above net 1-9 $1.53 10-24 $1.43 25-99 $1.34

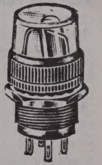
WITH 100K RESISTOR

Lens	Stovepipe (G)	Cylindrical (H)
Red	331-249-7841-0931-574	331-249-7841-1431-574
Amber	331-249-7841-0933-574	331-249-7841-1433-574
White	331-249-7841-0935-574	331-249-7841-1435-574
Lt. Yellow	331-249-7841-0936-574	331-249-7841-1436-574
Clear	331-249-7841-0937-574	331-249-7841-1437-574

Datalites above net 1-9 $1.88 10-24 $1.76 25-99 $1.65

ULTRA-MINIATURE INDICATOR LIGHTS
WITH REMOVABLE LAMP CARTRIDGES

For use in data-processing equipment, computers, and automation applications. Lamp cartridges removeable from front of panel. Assemblies conform to all applicable military specifications. Lightweight, rugged aluminum construction with molded phenolic insulation. Black anodized finish. Single hole mounting. Solder lug terminals.



SINGLE LAMP HOLDER

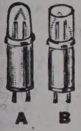
Mounts in 3/8" dia. clearance hole by means of hex nut and lock washer. Maximum diameter ½", overall length 1-13/16". Two phosphor bronze, silver plated and gold flashed solder terminals. Internal receptacle accepts either 38-Series neon or 39-Series incandescent lamp cartridges listed below. Furnished less lamp.

Cat. 331-508-7538-504 1-9 $1.54 10-24 $1.35

TWIN LAMP HOLDER

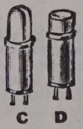
Mounts in ¾" dia. clearance hole by means of hex nut and lock washer. Clear plastic cover removeable for insertion of two 38-Series neon or 39-Series incandescent lamp cartridges. Maximum diameter 25/32", overall length 1-53/64". Four Berylium copper, cadmium plated solder terminals. Furnished less lamps.

Cat. 331-253-6939-1437-504 1-9 $4.22 10-24 $3.75



PLUG-IN LAMP CARTRIDGES

Dialco lamp cartridges consists of unbased NE-2E neon lamps, or T-1-¾ wire lead incandescent lamps, mounted in aluminum sleeves and capped with plastic lenses. Connections are by means of polarized stainless steel pins set in nylon insulation.



NEON TYPES

The NE-2E neon glow lamp consumes 1/25 watt, starts on 65 v-ac or 90 v-dc. Lamps require external 1/3 watt resistor to limit current to 0.3 ma. For 110-125 volts recommended values are: for bright light 56K ohms, for long life 100K ohms. Available in the lens shapes and transparent colors listed below.

Lens	Stovepipe (A)	Cylindrical (B)
Red	331-507-3835-0931-600	331-507-3835-1531-600
Amber	331-507-3835-0933-600	331-507-3835-1533-600
White	331-507-3835-0935-600	331-507-3835-1535-600
Lt. Yellow	331-507-3835-0936-600	331-507-3835-1536-600
Clear	331-507-3835-0937-600	331-507-3835-1537-600

Neon Lamp Cartridges net 1-9 $1.11 10-24 $.98

SINGLE LAMP HOLDER

Similar to type 508-7538-504 shown above but 5/16" longer to take the new longer Neon Cartridges listed to the right.

Cat. 331-508-7545-504 Holder **1-9 $1.54 10-24 $1.35**

T-1-¾ MIDGET BASE LAMPS FOR SUB-MINIATURE ASSEMBLIES

MIDGET FLANGED BASE

Sub-miniature types with midget flanged base. Bulb measures only 7/32" diameter. These are used in Dialco and other miniature pilot assemblies, indicators, etc.

Cat. No.	Lamp Type	Fil.		Approx. Life	Net Ea.	Net 10
		V.	A.			
331	331	1.35	.06	500 hrs.	**$1.36**	**$8.17**
338	338	2.7	.06	500 hrs.	**1.21**	**7.27**
328	328	6.0	.2	1000 hrs.	**.72**	**4.30**
330	330	14.0	.08	750 hrs.	**1.21**	**7.28**
327	327	28.0	.04	1000 hrs.	**.91**	**5.44**

MIDGET SCREW BASE

Maximum bulb diameter ¼". Maximum overall length 19/32". For instrument panel and novelty lamp use.

Cat.		Each	Net 10
1767	2.5 volts, 0.2 amps	**$1.09**	**$6.54**
1768	6.0 volts, 0.2 amps	**1.29**	**7.72**
1775	6.3 volts, .075 amps	**1.57**	**9.45**

INCANDESCENT TYPES

The T-1¾ incandescent lamps consume 0.2 amps at 6.0 volts. They are also available for 1.35, 2.7, 14 or 28 volts on special order. When ordering these substitute voltages be sure to include the voltage with your order. Available in the translucent lens colors as listed below.

Lens	Stovepipe (C)	Cylindrical (D)
Red	331-507-3906-0971-600	331-507-3906-1471-600
Green	331-507-3906-0972-600	331-507-3906-1472-600
Amber	331-507-3906-0973-600	331-507-3906-1473-600
Blue	331-507-3906-0974-600	331-507-3906-1474-600
White	331-507-3906-0975-600	331-507-3906-1475-600
Lt. Yellow	331-507-3906-0976-600	331-507-3906-1476-600

Lamp Cartridges net 1-9 $1.45 10-24 $1.29

STANDARD BRIGHTNESS TYPES

These are similar to the Type 3835 Plug-in Cartridges but are 5/64" longer. A built-in 56K resistor permits operation from 105-125 volts ac or dc.

Lens	Stovepipe (A)	Cylindrical (B)
Red	331-507-4537-0931-640	331-507-4537-1531-640
Amber	331-507-4537-0933-640	331-507-4537-1533-640
White	331-507-4537-0935-640	331-507-4537-1535-640
Lt. Yellow	331-507-4537-0936-640	331-507-4537-1536-640
Clear	331-507-4537-0937-640	331-507-4537-1537-640

Neon Lamp Cartridge net 1-9 $1.50 10-24 $1.32

HIGH BRIGHTNESS

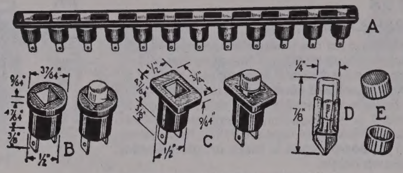
For use where high brightness is required. These are equipped with a 22K resistor to limit the load current when used on 110-125 v-ac.

Lens	Stovepipe (A)	Cylindrical (B)
Red	331-507-4538-0931-610	331-507-4538-1531-610
Amber	331-507-4538-0933-610	331-507-4538-1533-610
White	331-507-4538-0935-610	331-507-4538-1535-610
Lt. Yellow	331-507-4538-0936-610	331-507-4538-1536-610
Clear	331-507-4538-0937-610	331-507-4538-1537-610

Neon Lamp Cartridges net 1-9 $1.50 10-24 $1.32

INDUSTRIAL USERS WRITE FOR QUANTITY PRICES

SYLVANIA PILOT LIGHTS



MULTI-SOCKET STRIP*
INDICATOR LAMP ASSEMBLIES

Miniature indicator assemblies for computer and other electronic equipment. Strips are precision molded from Lexan. They (Fig. A) are supplied with 12 sockets per strip, with a choice of ½" or ¾" lamp centers, individual or common ground terminals. Sockets may be easily cut to exact number required. Terminals may be soldered to or will accept clip connectors. Furnished with Tinnerman type mounting clips.

Cat. No.	See Fig.	Lamp Ctrs.	Circuit Type	Net 1-99	100-up
86-31250-0	A	½"	Common ground	$2.94	$2.45
86-31275-0	A	¾"	Common ground	2.94	2.45
86-33250-0	A	½"	Individual	3.13	2.60
86-33275-0	A	¾"	Individual	3.13	2.60

EASY-MOUNT SINGLE SOCKETS

Embody same basic features as strip sockets above, but are for single indicators. They mount in ½" D-type holes by means of Tinnerman type clips which are included.

Cat. No.	See Fig.	Socket Type	Net 1-99	100-up
86-30150-0	B	Single round socket	$0.23	$0.19
86-30151-0	C	Single rect. socket	.23	.19

SHORT BASE INDICATOR LAMPS

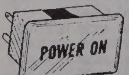
Switchboard-type incandescent indicator lamps for use in the strip and single sockets above. Overall length only .875" ± .040". Diameter .245"/.268". Bulb is clear. Slide-type metal base contacts securely imbedded in molded nylon plastic insulator. See Fig. D. †Lights to only cherry red glow. ‡Foot candles. Static life is from 3,000 to 15,000 hours depending on type & lamp.

Cat. No.	Type No.	Volt-age	Cur. Ma.	End FC‡	Net 1-9	10-99	100-499
86-30450-0	4ESB	4.0	35-45	200	$0.82	$0.49	$0.41
86-30550-0	5ESB	5.0	35-45	250			
86-30650-0	6ESB	6.0	35-45	250			
86-31063-0	10ESB	10.0	35-45	450			
86-31030-0	10CSB	10.0	15-20	100			
86-31255-0	12ESB	12.0	35-45	800			
86-31650-0	16ESB	16.0	35-45	900			
86-31630-0	16CSB	16.0	15-20	150			
86-31860-0	18ESB	18.0	35-45	1000			
86-32455-0	24ESB	24.0	35-45	1100			
86-32490-0	24CSB	24.0	15-20	200			
86-32900-0	28ESB	28.0	35-45	1285			
86-31040-0	10ASB	10.0	9-11	†	.82	.49	.41
86-34861-0	48ESB	48.0	35-45	2000	1.09	.66	.55

COLORED END CAPS

For use on the indicator lamps above for color identification. Available in Pyrex Glass or Profax Plastic. See Fig. E. *Add 1 ¢ to price.

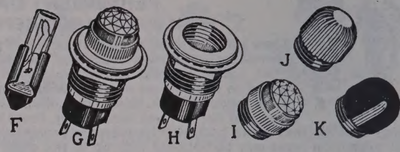
Color	PROFAX Cat. No.	PYREX Cat. No.	Net 1-9	10-99	100-499
Red	86-38001-0	86-38071-0*	$0.14	$0.08	$0.07
Yellow	86-38002-0	86-38072-0*			
White	86-38003-0	86-38073-0*			
Green	86-38004-0	86-38074-0*			
Blue	86-38005-0	86-38075-0*			



LEECRAFT SERIES 47 INDICATOR LIGHT

Fits into 3/16 x 5/8 panel opening. Built in lamps, resistor and solder terms. One-piece construction. Hi-heat plastic in colors below.

Lamp Volts	Red Cat. No.	Amber Cat. No.	White Cat. No.	Clear Cat. No.	Net Ea.
110-125	363-47-3	363-47-9	363-47-2	363-47-8	$1.27
210-250	363-47H-3	363-47H-9	363-47H-2	363-47H-8	1.27



MINIATURE PILOT LIGHTS

Fig. G. Designed to withstand the guelling stress of vibration a
shock encountered in missile-borne, aircraft, shipboard and grou
equipment, and to give trouble-free performance for a minimum
5000 hours static life at rated voltages. Overall diameter 13/1
length 1-27/32". Chrome plated 11/16"-27 threaded housi
mounts on up to 13/32" thick panels. Terminal lugs may be s
dered to, or used with connectors. Insulation is general purpo
phenolic. A complete assembly consists of a housing, lens and lam
The price for one complete assembly (1-a) is $1.17 Net. When
dering specify the catalog number of each component, and t
quantities required.

HOUSING. FIG. H.

Cat. No.	Description	Net 1-9	10-99	10 9
86-30099-0	Pilot housing only. Fig. H.	$1.26	$0.76	$0.

PILOT LIGHT LENSES

TRANSPARENT (K) Cat. No.	Color	JEWELLED (I) Cat. No.	Co
86-30110-0	Red	86-30100-0	R
86-30111-0	Amber	86-30102-0	Gre
86-30112-0	Green	86-30103-0	Bl
86-30113-0	Blue	86-30106-0	Amb
86-30114-0	Yellow		
86-30116-0	Clear	**OPAQUE (K)**	
FLUTED (J)		86-30130-0	R
86-30120-0	Red	86-30131-0	Yell
86-30122-0	Green	86-30132-0	Gre
86-30124-0	Blue	86-30133-0	Wh
86-30125-0	Clear		
86-30126-0	Amber		

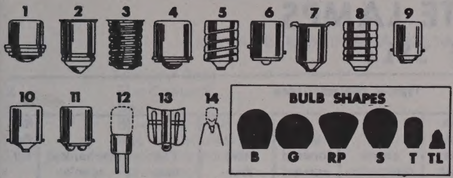
	Net 1-9	10-99	10 4
Transparent, Fluted or Opaque	$0.27	$0.16	$0.
Jewelled only	.60	.36	.

PILOT LIGHT LAMPS (F)

Overall length 1.075". Bulb diameter 0.24"-.275". Maximum co
tact diameter 0.312".

Cat. No.	Type No.	V.	Average Watts	Amp.	Net 1-9	10-99	10 4
86-30672-0	6PSB	6.0	.8	.140	$0.90	$0.54	$0.
86-31272-0	12PSB	12.0	2.0	.170			
86-32472-0	24PSB	24.0	1.7	.073			
86-32972-0	28PSB	28.0	1.1	.040			
86-34872-0	48PSB	48.0	2.5	.053			
86-36072-0	60PSB	60.0	3.0	.050			
86-32072-0	120PSB	120.0	3.0	.025			

MINIATURE & NEON LAMPS



MINIATURE & SUB-MINIATURE

Incandescent lamps for applications in aircraft, annunciators, appliances, automotive, coin machines, flashlights, marine, medical, indicators, radio & TV, telephone toys. Extra-long life, reliability, low cost, high light output. Bulb shapes are illustrated to the left. Typical base types are shown with corresponding number in listing below: (1) Sub-Midget Flanged, (2) Midget Grooved, (3) Midget Screw, (4) Midget Flanged, (5) Candelabra, (6) D.C. Bayonet Index, (7) Miniature Flanged, (8) Miniature Screw, (9) Miniature Bayonet, (10) S.C. Bayonet, (11) D.C. Bayonet, (12) Two-Pin, (13) Wedge, (14) Wire Terminal. Bulb number gives shape and diameter in eighths of an inch. For example, G-6 has a globular shape and is six-eighths or 3/4 of an inch in diameter.

Lamp No.	Bulb Type	Base Fig.	Circ. V.	Amps (CP Watts)	Net Ea.	Box 10
PR-2	B-3½	7	2.38	.5A	$0.26	$1.59
PR-3	B-3½	7	3.57	.5A	.26	1.59
PR-4	B-3½	7	2.33	.27A	.27	1.60
PR-6	B-3½	7	2.47	.3A	.26	1.59
PR-12	B-3½	7	5.95	.5A	.27	1.60
PR-13	B-3½	7	4.75	.5A	.26	1.59
12	G-3½	12	6.3	.15A	.36	2.13
13	G-3½	8	3.7	.3A	.22	1.34
14	G-3½	8	2.47	.3A	.22	1.34
40	T-3¼	8	6.3	.15A	.18	1.10
41	T-3¼	8	2.5	.5A	.36	2.14
43	T-3¼	9	2.5	.5A	.36	2.14
44	T-3¼	9	6.3	.25A	.19	1.11
45	T-3¼	9	3.2	.35A	.31	1.83
46	T-3¼	8	6.3	.25A	.18	1.09
47	T-3¼	9	6.3	.15A	.19	1.11
48	T-3¼	8	2.0	.06A	.36	2.14
49	T-3¼	9	2.0	.06A	.30	1.80
50	G-3½	8	7.5	1CP	.22	1.31
51	G-3½	9	7.5	1CP	.19	1.15
52	G-3½	8	14.4	1CP	.46	2.79
53	G-3¼	9	14.4	1CP	.21	1.28
55	G-4½	9	7.0	2CP	.22	1.29
57	G-4½	9	14.0	2CP	.22	1.31
63	G-6	10	7.0	3CP	.27	1.63
67	G-6	10	13.5	4CP	.28	1.71
68	G-6	11	12.0	4CP	.41	2.46
81	G-6	10	6.0	6CP	.32	1.94
82	G-6	11	6.0	6CP	.32	1.94
88	S-8	11	6.0	15CP	.51	3.04
93	S-8	10	12.0	15CP	.43	2.57
112	TL-3	8	1.2	.22A	.22	1.34
123	G-3½	8	1.25	.3A	.24	1.43
130	G-3½	9	6.3	.15A	.29	1.73
159	T-3¼	13	6.3	.15A	.35	2.11
219	G-3½	9	6.3	.25A	.57	3.40
222	TL-3	8	2.25	.25A	.22	1.34
239	T-3¼	9	6.3	.36A	.42	2.50
240	T-3¼	9	6.3	.36A	.38	2.20
307	S-8	10	28.0	21CP	.85	5.10
313	T-3¼	9	28.0	.17A	.46	2.75
327	T-1-3/4	4	28.0	.04A	.91	5.44
328	T-1-3/4	4	6.0	.20A	.72	4.30
330	T-1-3/4	4	14.0	.08A	1.21	7.28
331	T-1-3/4	4	1.35	.06A	1.36	8.17
334	T-1-3/4	2	28.0	.04A	1.36	8.16
335	T-1-3/4	3	28.0	.04A	2.13	12.80
336	T-1-3/4	2	14.0	.08A	2.08	12.50
337	T-1-3/4	2	6.0	.20A	2.40	14.40
338	T-1-3/4	4	2.7	.06A	1.21	7.27
344	T-1-3/4	4	10.0	.015A	1.91	11.45
345	T-1-3/4	4	6.0	.04A	2.11	12.65
346	T-1-3/4	2	18.0	.04A	1.75	10.50
367	T-1-3/4	4	10.0	.04A	2.38	14.30
370	T-1-3/4	4	18.0	.04A	2.11	12.70
378	T-1-3/4	3	6.3	.40A	2.49	14.90
379	T-1-3/4	2	6.3	.40A	1.65	9.90
380	T-1-3/4	4	6.3	.02A	2.94	17.60
381	T-1-3/4	4	6.3	.40A	$1.56	$9.30
382	T-1-3/4	4	14.0	.30A	1.79	10.70
386	T-1-3/4	2	14.0	.30A	2.14	12.80
387	T-1-3/4	4	28.0	.30A	1.02	6.10
388	T-1-3/4	2	28.0	.30A	2.13	12.70
502	G-4½	8	5.1	.15A	.24	1.43
680	T-1	14*	5.0	.06A	2.77	16.59
680AS15	T-1	14*	5.0	.06A	3.21	19.20
682	T-1	1	5.0	.06A	3.34	20.00
682AS15	T-1	1	5.0	.06A	3.74	22.50
683	T-1	14*	5.0	.06A	2.77	16.59
683AS15	T-1	14*	5.0	.06A	3.21	19.20
685	T-1	1	5.0	.06A	3.34	20.05
685AS15	T-1	1	5.0	.06A	3.74	21.20
715	T-1	14*	5.0	.115A	2.77	16.60
715AS15	T-1	14*	5.0	.115A	3.21	19.20
718	T-1	1	5.0	.115A	3.34	20.00
718AS15	T-1	1	5.0	.115A	3.74	22.50
755	T-3¼	9	6.3	.33A	.45	2.60
756	T-3¼	9	14.0	.31A	.60	3.50
757	T-3¼	9	28.0	.62A	.66	3.90
1016	S-8	6	12.0	21/6CP	.77	4.62
1034	S-8	6	12.8/14.0	32/4CP	.58	3.47
1073	S-8	10	12.0	32CP	.42	2.53
1129	S-8	10	6.0	21CP	.43	2.57
1130	S-8	11	6.0	21CP	.58	3.50
1133	RP-11	10	6.0	32CP	.76	4.57
1141	S-8	10	12.0	21CP	.42	2.53
1251	G-6	10	24.0	3CP	.71	4.24
1445	G-3½	9	12.0	1.5CP	.27	1.63
1447	G-3½	8	18.0	.15A	.29	1.71
1458	G-5	9	20.0	.25A	.49	2.93
1490	T-3¼	9	3.2	.16A	.30	1.77
1705	T-1-3/4	14*	14.0	.08A	.93	5.50
1730	T-1-3/4	14*	6.0	.04A	1.54	9.20
1764	T-1-3/4	14†	28.0	.04A	.76	4.50
1768	T-1-3/4	3	6.0	.20A	1.29	7.72
1769	T-1-3/4	3	2.5	.20A	1.53	9.17
1775	T-1-3/4	3	6.3	.075A	1.57	9.45
1784	T-1-3/4	14*	6.0	.20A	1.04	6.20
1813	T-3¼	9	14.4	.10A	.38	2.29
1815	T-3¼	9	14.0	.20A	.32	1.94
1816	T-3¼	9	13.0	.33A	.33	1.97
1819	T-3¼	9	28.0	.04A	.47	2.82
1820	T-3¼	9	28.0	.10A	.51	3.04
1829	T-3¼	9	28.0	.07A	.50	2.99
1847	T-3¼	9	6.3	.15A	.26	1.53
1850	T-3¼	9	5.0	.09A	.50	2.97
1869	T-1-3/4	14*	10.0	.015A	1.64	9.80
1891	T-3¼	9	14.0	.24A	.23	1.37
1892	T-3¼	9	14.4	.12A	.36	2.17
1893	T-3¼	9	14.0	.33A	.26	1.56
1895	G-4½	9	12.0	2CP	.31	1.85
2180	T-1-3/4	14*	6.3	.02A	1.56	9.30
2181	T-1-3/4	14*	6.3	.40A	.85	5.00
2182	T-1-3/4	14*	14.0	.30A	.91	.54
2187	T-1-3/4	14†	28.0	.30A	1.32	7.90

110 V. LAMPS

With clear glass envelopes. Normal operating life 1500 hrs. approx. Used in Dialco and other indicating devices.**Also avail. 230V.Specify.

Lamp No.	Watts	Bulb Type	Base Fig.	Net Ea.
3S6	3	S-6	5	$.50
6S6	6	S-6	5	.26
6S6-DC	6	S-6	5	.60
7C7	7	C-7	5	.33
T-4½	4	T-4½	5	.70
10S6**	10	S-6	5	.60

NEON GLOW INDICATOR LAMPS

Circuit Volts 105-125 except #210-250.

ASA	Trade	Bulb	Base	Watts	Ea
A1A	NE-2	T-2	14†	1/17	$.20
A2A	NE-2A	T-2	14‡	1/25	.20
A9A	NE-2E	T-2	14‡	1/15	.20
B1A	NE-51	T-3¼	9	1/25	.44
B2A	NE-51H	T-3¼	9	1/7HB	.44
B5A	NE-17	T-4½	11	1/4	1.58
B7A	NE-45	T-4½	5	1/4	1.53
B8A	NE-47	T-4½	10	1/4	1.53
B9A	NE-48	T-4½	11	1/4	1.25
C2A	NE-2H	T-2	14‡	1/4HB	.20
C7A	NE-2D	T-2	4	1/15	1.34
C9A	NE-2J	T-2	4	1/4HB	1.34
F3A	NE-57	T-4½	5	1/4	1.76
F4A	NE-58#	T-4½	5	1/2	1.65
J5A	NE-30	S-11	§	1	2.50
J9A	NE-56#	S-11	§	1	2.53

NEON GLOW CIRCUIT COMPONENT

All T-2 bulbs except NE-67=T-3¼ & NE-16=T-4½.

ASA	Trade	Base	Start V.	MA.	Pkg/10
4AB	NE-96	14†	120-150	.5	$.34
4AC	NE-97	14†	110-140	.5	.34
5AB	NE-23	14†	60-90	.3	.22
5AC	NE-68	14‡	60-90	.3	.60
5AG	NE-81	14†	64-80	.3	.89
5AG-A	NE-76	14	68-76	.4	1.16
5AJ	NE-86	14†	55-90	1.5	.40
6AC	NE-67	9	55-90	.2	.54
7AA	NE-16	11	67-87	1.5	1.56
8AA	NE-3	††	55-90	.3	1.20
8AB	NE-4	††	60-90	.3	.92

†1" lgth.; ‡2" lgth.; §Med. Screw; ††Tel. Slide.

GENERAL ELECTRIC
SOLID STATE LAMPS
VISIBLE SSL's

Lamp type	Typical output				Typical characteristics									
	Visable		Total											
	med	I_f (mA)	μW	I_f (mA)	Forward voltage (V)	Forward current (mA)	Reverse voltage @ 10μA V	Peak emission wave-length (nm)	Max. power dissipation (mW)	Max. forward current (mA)	Rise time (ns)	Fall time (ns)	Mechanical spec's (Fig. No.)	Ne Ea 1-9
SSL-3*	80 ft-L	100	—	—	1.35	100	2	539	800	400	<200,000	<150,000	5	5.6
SSL-12	1.0	5	100	5	2.0	5	3	700	37.5	15	<500	<500	1	.5
SSL-12C	1.0	5	100	5	2.0	5	3	700	37.5	15	<500	<500	1	.5
SSL-22	1.5	10	150	10	2.1	10	3	700	62.5	25	<500	<500	2	.5
SSL-22L	1.5	10	150	10	2.1	10	3	700	61.5	25	<500	<500	3	.5
SSL-212	1.0	5	100	5	1.0	5	3	700	37.5	15	<500	<500	4	.5

*Emits both visable and infrared simultaneously.

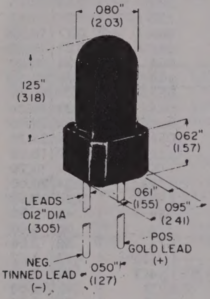


FIG. 1

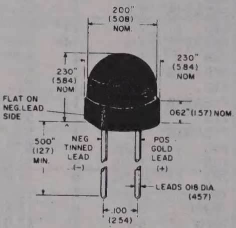


FIG. 2

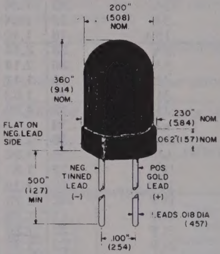


FIG. 3

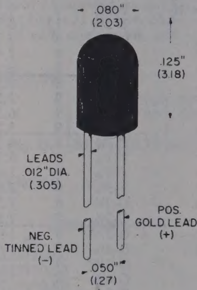


FIG. 4

INFRARED SSL's

Lamp type	Typical characteristics									
	Power output (mW) @ I_f	Forward voltage (V) @ I_f	Forward current I_f (mA)	Peak emission wavelength (nm)	Rise time (ns)	Fall time (ns)	Max. power dissipation (mW)	Max. forward current continuous (mA)	Mechanical spec's (Fig. No.)	Net Ea. 1-9
SSL-3*	1.0	1.35	100	940	<200,000	<150,000	800	400	5	5.66
SSL-4	0.4	1.25	100	900	<50	<50	1300	800	5	2.10
SSL-5A	1.5	1.35	100	940	<300	<200	1300	500	5	2.64
SSL-5B	2.3	1.35	100	940	<300	<200	1300	500	5	3.92
SSL-5C	2.9	1.35	100	940	<300	<200	1300	500	5	4.38
SSL-15	0.5	1.30	20	940	<700	<500	300	125	6	3.00
SSL-34	0.9	1.25	100	900	<50	<50	1300	800	5	2.40
SSL-35	5.5	1.35	100	940	<300	<200	1300	500	5	5.18
SSL-54	1.0	1.25	100	900	<50	<50	1300	300	5	2.00
SSL-55B	4.8	1.35	100	940	<300	<200	1300	300	5	3.32
SSL-55C	6.0	1.35	100	940	<300	<200	1300	300	5	4.16
SSL-56	2.5	1.35	100	940	<300	<200	1300	300	5	2.00
SSL-65	0.3	1.20	20	930	500	500	100	75	7	2.64
SSL-66B	0.4(min.)	1.30	50	930	500	500	150	75	8	3.00
SSL-66C	1.0(min.)	1.30	50	930	500	500	150	75	8	3.90
SSL-315	1.0	1.30	20	940	<700	<500	300	125	6	3.90

*Emits both visible and infrared simultaneously.

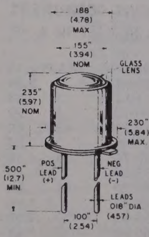


FIG. 5

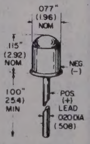


FIG. 6

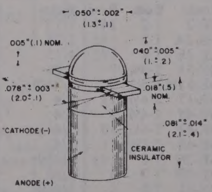


FIG. 7

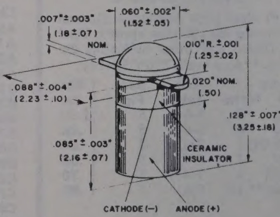


FIG. 8

BATTERY LISTING

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

	Terminal Code
A	Flat Contacts
B	Snap
C	Screw Terminals
D	Socket Terminals
E	Spring Terminals
F	Fahnestock

ALKALINE

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
1.5	.905 x .228	A		APX825	EPX825	PX825		.52
1.5	.470 x 1.130	A	910A	ALN	E90	MN9100	VS1073	.42
1.5	.410 x 1.745	A	24A	AL7	E92	MN2400	VS1074	.46
1.5	9/16 x 1-31/32	A	15A	AL9	E91	MN1500	VS1334	.46
1.5	1-11/32 x 1-13/64	A	927		E94			.52
1.5	1-1/36 x 1-15/16	A	14A	AL1	E93	MN1400	VS1335	.52
1.5	1-11/32 x 2-13/32	A	13A	AL2	E95	MN1300	VS1336	.65
3.0	.960 x .485	A		APX30	EPX30	PX30		1.04
3.0	.664 x 1.67	B	1308A	APX24	532	PX24	VS1339	1.23
3.0	9/16 x 2	A	1310A		529			1.14
4.5	.662 x 1.965	A	1306A	AL133	523	MN1306	VS1149	1.37
4.5	.662 x 2.290	B	1307A	ALX19	531	PX19	VS1337	1.37
4.5	.662 x 2.09	A					VS1338	1.36
6.0	5-17/32 x 4-21/32 x 2-21/32	C	930A		520			4.34
9.0	1 x .65 x 1.75	B					VS1323	.99

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

ALKALINE—MANGANESE DIOXIDE (rechargeable)

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
1.5	.55 x 1.94	A				SA15AA	VS1515	.70
1.5	1.01 x 1.93	A				SA14C	VS1514	1.07
1.5	1.30 x 2.36	A				SA13D	VS1513	1.25
4.5	1-23/04 x 7-5/32	A			563		VS1563	3.00
6	2-25/32 x 2-25/32 x 5-11/32	D			565			5.29
7.5	2-21/32 x 1-17/32 x 7-5/32	D			560		VS1560	5.29
13.5	8-5/16 x 2-13/16 x 5-7/8	D			564		VS1564	10.99
15	8-5/16 x 2-13/16 x 5-7/8	D			561		VS1561	11.29

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

CARBON ZINC

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
1½	.445 x 1.18	A	910F	310	904	M904F	VS073	.10
1½	13/32 x 1¾	A	24P	720	812			.20
1½	13/32 x 1¾		24F	7	912	M24F	VS074	.17
1½	9/16 x 1-31/32	A	5AA	900	AA33			.19
1½	9/16 x 1-31/32	A	15P	920	815	M15P	VS734	.20
1½	9/16 x 1-31/32	A	15F	Z	HS15	M15F	VS034A	.10
1½	9/16 x 1-31/32	A	15F	910	915	M15F	VS034A	.17
1½	9/16 x 1-31/32	A	15	930	1015	M15R	VS334	.19
1½	1-1/32 x 1-15/16	A	4C	100	C66			.23
1½	1-1/32 x 1-15/16	A			T35			.39
1½	1-1/32 x 1-15/16	A	14P	120	835	M14P	VS735	.23
1½	1-1/32 x 1-15/16	A	14F	700	HS35	M14F		.14
1½	1-1/32 x 1-15/16	A	14F	1	935	M14F	VS035A	.20
1½	1-1/32 x 1-15/16	A	14	130	1035	M14F	VS035A	.23
1½	1-11/32 x 2-13/32	A			T50			.48
1½	1-11/32 x 2-13/32	A	13P	220	850	M14P	VS735	.23
1½	1-11/32 x 2-13/32	A	13F	800	HS50	M134	VS036	.14
1½	1-11/32 x 2-13/32	A	13F	2	950	M13F	VS036	.26
1½	1-11/32 x 2-13/32	A	13D	200	D99	M130	VS343	.23
1½	1-11/32 x 2-13/32	A	13	230	1050	M13R	VS336	.23
1½	1-11/32 x 2-13/32	A	13C	1200	HS150	M13X		.14
1½	1-11/32 x 2-13/32	A	13C	210	1150			.20
1½	1-11/32 x 4-1/16	D	23	8R	960P		VS070	1.34
1½	1-11/32 x 4-5/16	A	20	21R	964		VS236	.75
1½	2-25/32 x 1-13/32 x 3-1/32	D	18		720		VS069	2.05
1½	2-19/32 x 1⅜ x 4-5/32	D	11	2F	W-353		VS141	1.44
1½	2⅝ x 1-5/16 x 4-1/32	C	700	2FH (2FBP)	711		VS101	1.06
1½	2⅝ x 2⅝ x 3-27/32	D	4	4F	742		VS004	1.23
1½	2⅝ x 2⅝ x 4-5/16	C	900	410	735	M900	VS106	1.13
1½	3-13/16 x 2⅝ x 4-1/32	D	5		743			2.91
1½	2⅝ x 6-21/32	C	905	6 Ign	HS6	M6X	VS006S	.91
1½	2⅝ x 6-21/32	C&F	905	6 Ign	6 Ign	M905	VS006S	1.20
1½	2⅝ x 6-21/32	C&F	906	6 Tel	6 Grayhill			1.20
1½	2⅝ x 6-21/32	C&F			6 Alarm			1.20
1½	2⅝ x 6-21/32	C&F	911	6 Ind	6 RR & Ind			1.20
1½	3-25/32 x 2-11/16 x 5⅜	D	17		741			3.18
3	1-7/32 x ⅝ x 2-21/32	E	704	422	750		VS134	1.54
3	2⅝ x 1-5/16 x 4-1/32	C	701	F2BP	W-352		VS100	2.06
3	5-¼ x 1-13/32 x 3-11/32	A			789			3.77
3	2⅝ x 2⅝ x 4-9/16	C		2F2H	W-356		VS136	3.01
3	2-9/16 x 13⅛	C			621			4.79
3	3-25/32 x 2-11/16 x 5-13/16	F	901	4F2H	W-357			2.70
4½	.662 x 1.965	A	1306		333		VS332	.87
4½	1-25/32 x ⅝ x 2-21/32	E	705	432	751			2.02
4½	2-7/16 x 27/32 x 3-1/16	E		532	703		VS346	1.54

BATTERY LISTING

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

	Terminal Code
A	Flat Contacts
B	Snap
C	Screw Terminals
D	Socket Terminals
E	Spring Terminals
F	Fahnestock

CARBON ZINC (Cont.)

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
4½	2-7/16 x 27/32 x 3	C		5360	781		VS028	1.71
4½	1-13/32 x 1-11/32 x 2¾	B	1610		243		VS324	2.39
4½	4-1/16 x 1-13/32 x 3-1/32	C	712	2370	761T		VS130	2.53
4½	4-3/32 x 1-7/16 x 2-15/16	D	19		726		VS072	2.40
4½	3-31/32 x 1-11/32 x 3¾	C			714			2.05
4½	3-15/16 x 1-5/16 x 4	D	3	F3	736		VS067	1.88
4½	3-15/16 x 1-5/16 x 4-21/32	D	7	63	746			2.67
4½	2-13/16 x 1¾ x 8-11/32	D	1303		273IN		VS337	3.77
6	1-7/32 x 1-7/32 x 2-11/21	A	2	24	724		VS068	1.54
6	1-9/32 x 1-9/32 x 2-11/32	A		A4				2.75
6	1-13/32 x 47/64 x 4-11/16	B	1405		2713N		VS338	2.40
6	2⅝ x 2⅝ x 4-13/32	E	908	F4M	509	M908	VS040C	1.20
6	2⅝ x 2⅝ x 4-13/32	F	917	F4SC	510F			1.25
6	2⅝ x 2⅝ x 4-5/16	C		F4BP	510S	M915	VS040S	1.20
6	2⅝ x 2⅝ x 3-27/32	D		F4P1	744		VS345	1.20
6	2⅝ x 2⅝ x 4-13/32	E	908C	600	HS90	M916X		.71
6	2⅝ x 2⅝ x 4-13/32	E	908C	F4H Ind	409	M916X		.96
6	2⅝ x 2⅝ x 3-27/32	D	920	F4BW	2744N			1.13
6	2⅝ x 2⅝ x 4-13/32	E	924		2745N			1.13
6	2⅝ x 2⅝ x 4-5/16	C	925		2746N			1.13
6	3-29/32 x 2¾ x 5-7/16	D	1	2F4	718			3.22
6	5-11/36 x 2-27/32 x 4-15/16	C	918	TW1	731	M918	VS317	2.47
6	8-5/16 x 2-13/16 x 6-7/16	C	902	4F4H	706		VS103	4.67
6	10-7/16 x 3-34/32 x 7-7/32	C	907	S461	1461	M907	VS039	4.30
6	5¼ x 5¼ x 7¼	C			1462			4.99
7½	2-27/32 x 19/32 x 1-29/32	C		W5BP	W-362			4.94
7½	3-29/32 x 53/64 x 2-27/32	D	8	B5	713		VS129	2.71
7½	3-29/26 x 27/32 x 3	C		5540	773		VS029	2.40
7½	2-5/32 x 1-15/16 x 3-1/32	D	9	C5	717		VS065	1.30
7½	2-9/16 x 2-1/32 x 2-13/16	B	26	D5	707		VS315	1.71
7½	7/14 x 4-1/16 x 6-7/16	C	903	4F5H	715	M903	VS139	5.30
7½	7-27/32 x 4-31/32 x 7-7/32	C			1562			5.65
9	3/5 x 3/5 x 1-9/10	B	1606	Y6				.83
9	¾ x 2	A	1611	B206/L6	206	M1611	VS327	.62
9	1-1/32 x 21/32 x 1-29/32	B	1604			M1604	VS323	.54
9	1-1/32 x 11/16 x 1-15/16	B	1604D	2MN6	222			.64
9	1 x 1-15/16	B	1600	P6	226	M1600	VS300A	.79
9	1-13/32 x 47/64 x 4-11/16	B	1613		2709N		VS339	1.88
9	1-13/32 x 1-11/32 x 2¾	B	1602	2N6	146	M1602	VS305	1.54
9	1-13/32 x 1-13/16 x 2-7/16	B	1605	B266/M6	266	M1605	VS322	1.36
9	8 x 2-13/16 x 1-9/16	D	1601	D6P1	2506		VS301	2.71
9	2-9/16 x 2-1/32 x 3-5/32	B	1603	D6	276	M1603	VS306	1.71
9	2-3/16 x 1-5/32 x 6¼	B	1612	C6X	2356N		VS330	2.40
9	2-3/16 x 1-5/32 x 7-31/32	D	1608	D6S	2761N		VS5331	5.14
9	2-13/16 x 1¾ x 8-11/32	D	1609		2762N			3.77
9	8-37/64 x 4-1/16 x 6-7/16	C		4F6H	716	M904	VS140	5.97
9	7-13/16 x 5-9/32 x 7¼	C	913		1662			6.32
10½	2½ x 1-25/32 x 2-11/32	B		2X7				5.10
12	1 x 2-7/16	B	1810	PM8	228		VS329	1.20
12	1-5/10 x 1-5/10 x 3-19/32	A		2VT8				2.00
12	5-11/32 x 2-27/32 x 4-15/16	C	926	TW2	732		VS342	2.84
12	5-11/32 x 2-27/32 x 4-5/32	D	923		278ON			3.13
12	8-5/16 x 2-13/16 x 5-13/16	C		2F8H				4.25
12	10-7/16 x 2-23/32 x 7-7/32	C	922	2G8H	1463		VS340	5.73
12	10¼ x 5¼ x 6⅝	D			1862			9.45
13½	1-21/64 x 1-1/32 x 2-11/16	D	1900	XX9	239		VS304	2.67
15	39/64 x 19/32 x 1⅜	A	220	Y10	504	M504	VS704	1.03
15	1-1/32 x ⅝ x 1-29/64	A	208	U10	411	M208	VS083	1.03
15	1-5/16 x 31/32 x 1-9/18	A	224	K10	417			1.71
22½	19/32 x 19/32 x 1.975	A	221	Y15	505	M505	VS705	1.20
22½	1-1/32 x ⅝ x 2	A	215	U15	412	M215	VS084	1.20
22½	1-5/16 x 31/32 x 2-3/16	A	225	K15	420			2.02
22½	1-23/64 x 1-1/32 x 3-15/16	D		XX15	425P			3.08
22½	3½ x 2-3/32 x 3-1/16	C	710	4156	763		VS102	2.02
22½	4 x 2-7/16 x 3-⅛	F	708	5156SC	778		VS131	5.45
22½	6-13/16 x 4-3/16 x 3-5/16	F	702		766T			7.20
30	1-13/64 x ⅝ x 1-27/64	A	223	Y20	506	M506		2.53
30	39/64 x 19/32 x 2.605	A		Y20S	507	M507		1.54
30	1-1/32 x 5.8 x 2-9/16	A	210	U20	413	M210	VS085	1.34
30	1-5/16 x 1 x 2-13/16	A		K20	430			2.40
45	1-3/64 x ⅝ x 3-11/16	B	213	U30	415		VS086	1.88
45	1-57/64 x 1-⅝ x 2.43	A		K30P	460	PX18	VS3204	2.40
45	2-21/32 x 1 x 3-11/16	B		XX30	455		VS055	2.29
45	2-21/32 x 1-1/64 x 3-29/32	D		XX30P1	455P	M201		2.57
45	3 x 1¼ x 3-25/32	C		W30				5.90
45	3-1/16 x 1-⅞ x 4-31/32	C		230NX	W-350		VS114	3.76
45	3 x 2-5/16 x 4-⅛	D	205	230	738		VS015	3.42
45	3-9/16 x 2¼ x 4½	D		A30	W-359		VS014	4.94
45	3-19/32 x 1-27/32 x 5½	D	202	M30	482		VS013	2.98
45	4-3/32 x 2-9/16 x 5-7/16	C	709	5308	762S		VS112	3.77
45	3-31/32 x 2-17/32 x 5 5/16	D	207	B30	484		VS344	4.08
45	5-⅛ x 2-1/16 x 7¼	D		D30	487			4.27
45	8-1/16 x 2-15/16 7⅝	F	723	2308SC	W365F			11.30
45	8-1/16 x 2-15/16 x 7-1/16	D		2308P1	W-365P			11.30

BATTERY LISTING

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

	Terminal Code
A	Flat Contacts
B	Snap
C	Screw Terminals
D	Socket Terminals
E	Spring Terminals
F	Fahnestock

CARBON ZINC (Cont.)

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
45	8-1/32 x 4-1/16 x 7-⅝	F		103085C	W-363F		VS127W	11.30
45	8-1/32 x 4-1/16 x 7-1/16	D		10308P1	W-363P			11.30
45	8-⅛ x 4-1/16 x 7-11/16	F		21308SC	W-364F		VS157W	12.33
50	8 x 4-⅜ x 8-⅝	F		10338	799			16.78
63	2 x 1-1/16 x 5-7/16	B	211	P45	477	VS218		2.71
67½	1-21/64 x 63/64 x 3½	B	217	UX45	416		VS318	2.23
67½	2-13/16 x 1-⅜ x 2½	B	203	K45	457		VS082	2.91
67½	2-13/16 x 1-⅝ x 3-45/64	B	200	XX45	467	M200	VS016	2.71
67½	2-13/16 x 1-⅜ x 3-45/64	B	200C	V45	468		VS125	2.91
69	2-9/16 x 2-⅛ x 8-7/64	A	914D	Z46	646			3.83
75	1-15/16 x 1-15/32 x 6-15/32	B	212	XX50	437		VS217	3.77
90	1-59/64 x 1-1/16 x 7-13/32	B	214	P60	479		VS219	2.98
90	3-23/32 x 1-⅜ x 3-45/64	B	204	V60	490		VS090	3.25
90	1-15/16 x 1-15/32 x 7-⅛	B		N60X	495		VS316	4.45
103½	1-⅜ x 1-⅜ x 11-23/32	A	227	XX69	W-361			5.82
225	3-9/16 x 2-29/32 x 4-29/32	D	730	N150	492	PF492		9.59
225	4-11/32 x 2-11/16 x 4-3/10	D	728	XX150	489	PF489	VS789	7.88
240	2-19/32 x 1-5/16 x 4½	D&A		U160	491	PF491	VS791	7.53
300	2-11/16 x 2-7/32 x 3-29/32	D	722	U200	493		VS093	9.75
450	6-¾ x 3 x 5	D	740		496			15.76
510	3 x 1-19/32 x 5-⅝	A		U320	497	PF497	VS797	13.63
Battery Packs								
1½-90	3-27/32 x 2-7/32 x 7-13/16	D	425		729			7.19
1½-90	9-31/32 x 2-¼ x 4-7/16	D		6TA60				11.40
1½-90	15-11/16 x 4-1/32 x 6-15/16	D			759			11.64
6-7½-75	8-9/16 x 3-¾ x 2-7/16	D	403		755			8.15
7½-9-90	8-⅜ x 2-⅛ x 3-25/32	D	405		756		VS057W	7.53
7½-9-90	9-7/32 x 2-23/32 x 4-5/16	D	403		753			9.52
9-90	9-7/32 x 2-23/32 x 4-7/32	D	406		757			10.21
9-90	14-1/16 x 2-11/16 x 4-1/16	D	400	G6B60	752		VS047	8.56

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

MERCURY

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
1.4	.310 x .140	A		HG312	E312	RM312		.32
1.4	.310 x .14	A		HG312H	E312E	RM312H		.42
1.4	.455 x .135	A	1106M	HG400	E400	RM400	VS400	.53
1.35	.455 x .135	A		HG400R	E400N	RM400R		.72
1.4	.310 x .210	A			E13			.32
1.4	.310 x .210	A		HG13E	E13N	RM13H		.42
1.4	.495 x .286	A	930A		E520			.23
1.4	.455 x .162	A			E41			.32
1.4	.455 x .162	A		HG41E	E41E	RM41H		.42
1.35	.455 x .210	A			EPX675	PX675		.72
1.4	.455 x .205	A		HG675	E675E	RM675H		.50
1.4	.455 x .210	A			E675	RM675	VS675	.35
1.4	.455 x .210	A			EPX675E	MP675H		.84
1.35	.615 x .238	A		APX625	EPX625	PX625		.72
1.35	.615 x .238	A		HPX13	EPX13	PX13		.72
1.35	.615 x .238	A		HG630R	E630N	RM630R		.68
1.35	.615 x .238	A		HG625R	E625N	RM625R		.68
1.4	.615 x .238	A		HG625	E625	RM625		.54
1.35	.455 x .570	A		HG450R	E450	RM450R		.90
1.4	.615 x .238	A	1140M	HG630	E630	RM630	VS630	.68
1.35	.625 x .440	A		APX640	EPX640	PX640		.72
1.40	.625 x .440	A	1105M	HG640	E640	RM640	VS640	.68
1.35	.625 x .440	A			E640N	RM640R		.68
1.4	.47 x 1.13	A	910M	HG401	E401	RM401	VS401	.72
1.35	.47 x 1.13	A			E401	RM401R		.90
1.35	.625 x .645	A			EPX1	PX1		.90
1.4	.625 x .645	A	1100M	HG1	E1	RM1	VS1	.72
1.35	.625 x .645	A		HG1R	E1N	RM1R		.90
1.35	.985 x .66	A			E3	RM3R		1.40
1.35	.55 x 1.968	A	930A		E520			.23
1.40	.55 x 1.968	A	15M	HG9	E9	ZM9	VS9	.72
1.35	1.195 x .66	A		HG4R	E4			1.80
1.40	.64 x 1.968	A	1101M	HG12	E12	RM12	VS12	1.26
1.35	.64 x 1.968	A			E12N	RM12R		1.40
1.4	19/32 x 2.39	A	13M	HG42	E42	RM42		3.60
1.35	19/32 x 2.39	A		HG42R	E42N	RM42R		3.96
1.35	15/16 x 2-7/16	wire		302651	E302651	302651	VS302652	5.04
1.35	2½ x 1⅜ x 4¼	D		302157	E302157	302157	VS302157	12.96
2.7-2.8	.661 x .607	A		HPX14	EPX14	PX14		1.44
2.7-2.8	.485 x 1.139	A		H152	E152	TR152		1.22
2.7-2.8	.485 x 1.139	A		H152R	E152N	TR152R		1.40
2.7-2.8	.662 x .887	A		H162R	E162	TR162R		1.40
2.8	.662 x 1.315	A	1200M	H132	E132	R132	VS132	1.40
2.7	.662 x 1.315	A		H132R	E132N	TR132R		1.40
2.7	1⅛ x 1⅝	wire		302702	E302702	302702	VS302702	4.32
4.05	.475 x .680	A		HPX29	EPX29	PX29		1.40

BATTERY LISTING

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

	Terminal Code
A	Flat Contacts
B	Snap
C	Screw Terminals
D	Socket Terminals
E	Spring Terminals
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MERCURY (Cont.)

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea
4.05	.66 x .845	A		HPX25	EPX25	PX25		1.8
4.05	.66 x .845	A		H113	E113	TR113R		1.8
4.2	.485 x 1.708	A		H153	E153	TR153		1.5
4.05	.485 x 1.708	A		H153R	E153N	TR153R		1.8
4.2	.662 x 1.327	A	1305M	H163	E163	TR163		1.9
4.05	.662 x 1.327	A		H163R	E163N	TR163R		1.9
4.2	.655 x 1.33	A		303496	E303496	303496	VS303496	1.4
4.2	.662 x 1.965	A	1306M	H133	E133	TR133	VS133	1.8
4.05	.662 x 1.965	A		H133N	E133N	TR133R		1.8
4.2	.628 x 1.93	A		303236	E303236	303236	VS303236	1.4
4.2	1.015 x 1-31/32	A	1300M	H233	E233	TR233	VS233	3.2
4.05	1.015 x 1-31/32	A			E233N	TR233R		3.2
5.6	.600 x .787	A		HPX23	EPX23	PX23		.7
5.4	.660 x 1.08	A		H114	E114	TR114R		2.3
5.6	.662 x 1.767	A	1404M	H164	E164	TR164	VS164	1.8
5.4	.662 x 1.767	A		H164R	E164N	TR164R		1.9
5.6	.662 x 1.965	A		HPX4	EPX4	RM4R		2.1
5.6	.662 x 2.62	A			E134	TR134		1.9
5.4	.662 x 2.62	A		H134R	E134N	TR134R		2.1
5.6	1.015 x 2⅝	A		H234	E234	TR234		3.2
5.4	1.015 x 2⅝	A			E234N	TR234N		3.5
5.4	1-1/6 x 2⅝	A		302351	E302351	302351	VS302351	7.0
5.4	1-11/32 x 2-15/16	wire		302904	E302904	302904	VS302904	7.9
7.00	.495 x 1-3/32	A	1501M	H175	E175	TR175		1.6
6.75	.66 x 1.32	A		H115R	E115N	TR115R		2.6
6.75	11/16 x 1½	A		302435	E302435	302435	VS302435	3.6
7.00	.662 x 1.32	A		H115	E115	TR115		2.5
7.00	.662 x 1.205	A		H145	E145	TR145		1.9
7.00	.662 x 2.217	A	1500M	H165	E165	TR165	VS165	2.3
6.75	.662 x 2.217	A		H165R	E154N	TR165R		2.3
7.00	.662 x 3.275	A			E135	TR135		2.3
6.75	.662 x 3.275	A		H135R	E135N	TR135R		2.5
6.75	1.039 x 4-3/16	C		302497	E302497	302497	VS302497	10.0
6.75	1.015 x 3-5/16	A			E235N	TR235R		4.2
7.00	1-9/32 x 2⅝	A		302642	E302642	302642	VS302642	5.7
6.75	1-11/32 x 3-9/16	wire		302905	E302905	302905	VS302905	9.0
8.40	1.031 x .66 x 1.75	B		H146X	E146X	TR146X	VS146X	1.3
8.4	.73 x 2	A	1611M	H126	E126	TR126	VS126	1.8
8.4	1 x 1.94	B	1600M	H286	E286	TR286		1.8
8.4	.662 x 3.93	A			E136	TR136		2.5
8.10	.662 x 3.93	A		H136R	E136N	TR136N		2.8
8.10	.662 x 4.145	A		HPX6	EPX6	PX6		3.2
8.10	1.015 x 3.906	A			E236N	TR236R		4.6
8.4	2-3/16 x 27/32 x 4-7/16	B		303145	E303145	303145	VS303145	7.2
9.8	.515 x 1⅝	A		303219	E303219	303219	VS303219	2.1
9.8	35/64 x 1-29/32	B	1606M	H177	E177	TR177	VS177	1.8
9.45	11/16 x 1-29/32	tab		302250	E302250	302250	VS302250	2.2
9.8	.662 x 4.585	A			E137	TR137		3.0
9.45	.662 x 4.585	A		H137R	E137N	TR137R		3.2
9.8	1¼ x 3⅝	A		302478	E302478	302478	VS302478	7.1
9.45	1-11/32 x 4⅞	wire		302907	E302907	302907	VS302907	11.5
10.8	¾ x 2-3/16	wire		302358	E302358	302358	VS302358	4.3
10.8	1-11/32 x 5-9/16	wire		302908	E302908	302908	VS302908	12.9
11.2	2½ x 1¾ x 2.28	B		303394	E303394	303394	VS303394	10.4
12.6	.662 x 3.997	A	1901M	H169	E169	TR169		3.9
12.6	1 x 2.41	B		H289	TR289	TR289		3.6
15.4	2.12 x 2.14 x 1.8	A		303462	E303462	303462	VS303462	11.8
16.2	¾ x 3-5/32	wire		302362	E302362	302362	VS302362	5.7
16.8	2.85 x 2.81 x 1.32	A		303314	E303314	303314	VS303314	11.5
27	2-23/32 x 2-23/32 x 3-29/32	D		302580	E302580	302580	VS302580	34.5
29.7	1-13/32 x ¾ x 3-3/16	wire		302579	E302579	302579	VS302579	12.9
47.25	2⅛ x 3¾	wire		302465	E302465	302465	VS302465	23.0
97.2	2-13/16 x 1-17/32 x 6-13/32	wire		302462	E302462	302462	VS302462	40.3

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

NICKEL CADMIUM

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
1.25	.457 x .213	flat		CD1	B20			1.5
1.25	.457 x .223	tap			B20T			1.7
1.25	.610 x .235	flat		CD2	B50			1.1
1.25	.610 x .245	tab			B50T			1.3
1.25	1 x .559 x .236	flat			0B70			1.9
1.25	1 x .559 x .246	tab			0B70T			2.1
1.25	.992 x .252	flat		CD8	B100			1.2
1.25	.992 x .264	tab		CD81	B100T			1.4
1.25	.992 x .272	flat	1604M	CD3	B150			1.30
1.25	.992 x .284	tab		CD3L	B150T			1.5
1.25	.475 x 1.135	flat			CF150			1.9
1.25	.475 x 1.145	tab			CF150T			2.1
1.25	.475 x 1.135	flat			CH150			1.7
1.25	.475 x 1.145	tab			CH150T			1.9
1.25	.992 x .351	flat		CD4	B225			1.3
1.25	.992 x .363	tab		CD4L	B225T			1.5
1.25	.992 x .358	flat			BH225			1.4

BATTERY LISTING

BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

	Terminal Code
A	Flat Contacts
B	Snap
C	Screw Terminals
D	Socket Terminals
E	Spring Terminals
F	Fahnestock

NICKEL CADMIUM (Cont.)

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
1.25	.992 x .370	tab			BH225T			1.67
1.25	.675 x .646	flat			CF225			1.93
1.25	.675 x .652	tab			CF225T			2.13
1.25	.675 x .646	flat			CH225			1.77
1.25	.675 x .652	tab			CH225T			1.97
1.25	.992 x .571	flat			B400			2.57
1.25	.992 x .583	tab			B400T			2.77
1.25	1.697 x .315	flat		CD5	B450			1.97
1.25	1.697 x .327	tab		CD5L	B450T			2.17
1.25	.675 x 1.116	flat			CF450			2.70
1.25	.675 x 1.122	tab			CF450T			2.90
1.25	.675 x 1.116	flat			CH450			2.47
1.25	.675 x 1.1222	tab			CH450T			2.67
1.25	1.36 x .394	flat			BH500			2.37
1.25	1.36 x .406	tab			BH500T			2.57
1.25	.503 x 1 969	flat			CF500			2.30
1.25	.563 x 1.974	tab			CF500T			2.50
1.25	.503 x 1.969	flat		CD6	CH500			2.10
1.25	.563 x 1.974	tab		CD6L	CH500T			2.30
1.25	1.98 x .394	flat			B1			3.37
1.25	1.98 x .406	tab			B1T			3.57
1.25	1.98 x .394	flat			BH1			4.00
1.25	1.98 x .406	tab			BH1T			4.20
1.25	1.043 x 1.161	flat			CF1			3.03
1.25	1.043 x 1.175	tab			CF1T			3.34
1.25	1.043 x 1.161	flat			CH1			2.77
1.25	1.043 x 1.175	tab			CH1T			3.03
1.25	.900 x 1.684	flat			CF1.2			3.34
1.25	.900 x 1.704	tab			CF1.2T			3.54
1.25	.900 x 1.684	flat		CD12	CH1.2			3.03
1.25	.900 x 1.704	tab		CD12L	CH1.2T			3.23
1.25	1.031 x 1.910	flat		CD14	CH1.8			5.97
1.25	1.031 x 1.920	tab		CD14L	CH14L			6.17
1.25	1.984 x .669	flat			B2			5.50
1.25	1.984 x .681	tab			B2T			5.70
1.25	1.344 x 1.508	flat		CD13	CH22			7.37
1.25	1.344 x 1.518	tab		CD13L	CH2.2T			7.51
1.25	1.984 x .976	flat			B3			6.94
1.25	1.984 x .988	tab			B3T			7.14
1.25	1.305 x 2.40	flat			CF4			7.67
1.25	1.305 x 2.41	tab			CF4T			7.87
1.25	1.294 x 2.39	flat		CD10	CH4			6.97
1.25	1.294 x 2.41	tab		CD10L	CH4T			7.17
1.25	1-31/32 x 1-45/64 x 3-45/64	screw		CD105	R6			13.61
1.25	1⅝ x 1-33/64 x 4-1/64	screw			RH7			18.91
1.25	3-19/32 x 1-1/16 x 4-59/64	screw			R11			19.08
1.25	3-19/32 x 1-25/64 x 4-59/64	screw		CD109	R15			22.94
1.25	3-1/32 x 1-3/16 x 4-31/32	screw			RH15			32.18
1.25	3-19/32 x 2-1/64 x 5-59/64	screw		CD111	R23			31.88
6.25	1-17/32 x 1-17/32 x 3-53/64	wire		CD30	N67			25.88
6.25	5-1/32 x 1-1/32 x 2-31/64	screw			N91			21.71
6.25	3-⅞ x 1-9/16 x 3-21/32	wire		CD31	N70			35.55
8.75	1-3/64 x 39/64 x 1-15/16	snap			N88			6.54
10	6-13/32 x 3-3/32 x 3⅛	socket			1007			57.96
12.5	5-1/32 x 2-1/32 x 2-31/64	screw			N86			36.38
13.75	7.32 x 3.10 x 1.46	socket			N65			95.87
15	2⅞ x 2-51/64 x 1-21/64	screw			N64			57.60

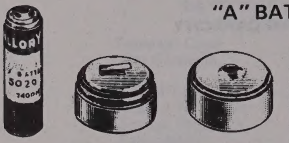
BATTERIES IN ORDER OF VOLTAGE AND INCREASING CAPACITY

SILVER OXIDE

Voltage	Size	Terminal	NEDA	Burgess	Eveready	Mallory	RCA	Net Ea.
1.5	.310 x .140	A			S312			.34
1.5	.310 x .210	A		13S0	S13	MS13		.36
1.5	455 x .165	A		41S0	S41	MS41		.36
1.5	.455 x .220	A			EPX77			1.09
1.5	.455 x .211	A	1107S0	76S0	S76	MS76	US1776	.41
6V	.510 x .990	A	1406A		54Y	PX28		1.71

MALLORY MERCURY BATTERIES

"A" BATTERIES FOR ELECTRONIC EQUIPMENT



Provide, under adverse conditions, up to three or four times the energy volume of other types of batteries. Featuring long shelf life and dependable operation despite long periods of non-use, or temperatures as high as 250° F. Flat terminals unless otherwise noted.

Cat. No.	Volts	Cap., Ma-Hrs.	Size, Inches L. x W. x H.	Net Ea.
47-RM-1	1.4	1000	5/8 dia. x 21/32	**$0.72**
47-RM-1R	1.35	1000	5/8 dia. x 21/32	**.88**
47-RM-1RT†	1.35	1000	5/8 dia. x 21/32	**.92**
47-RM-1RT2‡	1.35	1000	5/8 dia. x 21/32	**.97**
47-RM-3R	1.35	2200	1 dia. x 21/32	**1.36**
47-RM-4R	1.35	3400	1.2 dia. x 21/32	**1.74**
47-RM-4RT†	1.35	3400	1.2 dia. x 21/32	**1.79**
47-RM-4Z	1.4	2400	1.2 dia. x 1/2	**1.15**
47-RM-12	1.4	3600	5/8 dia. x 2	**1.23**
47-RM-12R	1.35	3600	5/8 dia. x 2	**1.36**
47-RM-12RT†	1.35	3600	5/8 dia. x 2	**1.41**
47-RM-12RT2‡	1.35	3600	5/8 dia. x 2	**1.46**
47-RM-42	1.4	14000	1.2 dia. x 2-3/8	**3.51**
47-RM-42R	1.35	14000	1.2 dia. x 2-3/8	**3.84**
47-RM-42RT‡	1.35	14000	1.2 dia. x 2-3/8	**3.89**
47-RM-42RT2‡	1.35	14000	1.2 dia. x 2-3/8	**3.94**
47-RM-312	1.4	36	5/16 dia. x 9/64	**.25**
47-RM-400	1.4	80	29/64 dia. x 9/64	**.53**
47-RM-400R	1.35	75	29/64 dia. x 9/64	**.72**
47-RM-400RT2‡	1.35	80	29/64 dia. x 9/64	**.82**
47-RM-401	1.35	800	29/64 dia. x 1-1/8	**.72**
47-RM-401R	1.35	800	29/64 dia. x 1-1/8	**.88**
47-RM-411	14	160	1 x 17/32 x 1-3/32	**2.08**
47-RM-412	22.4	160	1 x 17/32 x 1-5/16	**2.79**
47-RM-413	28	160	1 x 17/32 x 2-1/2	**3.51**
47-RM-415§	42	160	1 x 17/32 x 3-1/2	**5.23**
47-RM-450R	1.35	350	29/64 dia. x 9/16	**.88**
47-RM-502R	1.35	2400	1/2 dia. x 1-31/32	**1.23**
47-RM-520	1.4	130	1/2 dia. x 9/32	**.18**
47-RM-575	1.4	100	.455 dia. x .129	**.25**
47-RM-601R	1.35	1800	5/8 dia. x 1-5/32	**1.23**
47-RM-625	1.4	250	5/8 dia. x 1/4	**.67**
47-RM-625R	1.35	350	5/8 dia. x 1/4	**.78**
47-RM-625RT†	1.35	350	5/8 dia. x 1/4	**.83**
47-RM-625RT2‡	1.35	350	5/8 dia. x 1/4	**.88**
47-RM-630	1.4	350	5/8 dia. x 1/4	**.67**
47-RM-630R	1.35	250	5/8 dia. x 1/4	**.78**
47-RM-640*	1.4	500	5/8 dia. x 7/16	**.66**
47-RM-640R	1.35	500	5/8 dia. x 7/16	**.78**
47-RM-640RT2‡	1.35	500	5/8 dia. x 7/16	**.88**
47-RM-675	1.4	175	29/64 dia. x 13/64	**$0.37**
47-TR-112	2.8	350	21/32 dia. x 19/64	**1.81**
47-TR-113R	4.05	250	21/32 dia. x 53/64	**2.07**
47-TR-114R	5.4	250	21/32 dia. x 1-1/16	**2.28**
47-TR-114RT2‡	5.4	250	21/32 dia. x 1-1/16	**2.38**
47-TR-115	7.0	250	21/32 dia. x 1-5/16	**2.52**
47-TR-115R	6.75	250	21/32 dia. x 1-5/16	**2.60**
47-TR-118	11.2	350	21/32 dia. x 2-1/32	**3.24**
47-TR-126††	8.4	600	3/4 dia. x 1-15/16	**1.80**
47-TR-132	2.8	1000	21/32 dia. x 1-5/16	**1.22**
47-TR-132R	2.7	1000	21/32dia. x 1-5/16	**1.57**
47-TR-133*††	4.2	1000	21/32 dia. x 2	**1.80**
47-TR-133R	4.05	1000	21/32 dia. x 2	**2.00**
47-TR-134	5.6	1000	21/32 dia. x 2-9/64	**1.74**
47-TR-134R	5.4	1000	21/32 dia. x 2-9/64	**1.84**
47-TR-134T2‡	5.6	1000	21/32 dia. x 2-9/64	**2.42**
47-TR-135	7.0	1000	21/32 dia. x 3-1/4	**2.33**
47-TR-135R	6.75	1000	21/32 dia. x 3-1/4	**2.88**
47-TR-136	8.4	1000	21/32 dia. x 3-29/32	**2.45**
47-TR-136R	8.1	1000	21/32 dia. x 3-29/32	**3.22**
47-TR-137	9.8	1000	21/32 dia. x 4-9/16	**2.82**
47-TR-137R	9.45	1000	21/32 dia. x 4-9/16	**3.61**
47-TR-145	7	250	21/32 dia. x 1-3/16	**1.85**
47-TR-146X§††*	8.4	350	1 x 19/32 x 1-15/16	**1.27**
47-TR152	2.8	350	15/32 dia. x 1-1/8	**.93**
47-TR-152R	2.7	350	15/32 dia. x 1-1/8	**1.36**
47-TR-153	4.2	350	15/32 dia. x 1-11/16	**1.26**
47-TR-153R	4.05	350	15/32 dia. x 1-11/16	**1.74**
47-TR-162R	2.7	500	21/32 dia. x 7/8	**1.71**
47-TR-163‡‡	4.2	500	21/32 dia. x 1-5/16	**1.98**
47-TR-163R	4.05	500	21/32 dia. x 1-5/16	**2.23**
47-TR-164††	5.6	500	21/32 dia. x 1-3/4	**1.80**
47-TR-164R	5.40	500	21/32 dia. x 1-3/4	**2.44**
47-TR-165‡‡	7	500	21/32 dia. x 2-3/16	**2.33**
47-TR-165R	6.75	500	21/32 dia. x 2-3/16	**2.60**
47-TR-169	12.6	500	21/32 dia. x 3-7/8	**3.90**
47-TR-175††	7	350	31/64 dia. x 1-3/32	**1.61**
47-TR-177§††	9.8	250	35/64 dia. x 1-29/32	**1.80**
47-TR-233††	4.2	2200	1-1/64 dia. x 1-31/32	**3.23**
47-TR-233R	4.05	2200	1-1/64 dia. x 1-31/32	**2.61**
47-TR-234	5.6	2200	1-1/64 dia. x 2-19/32	**2.98**
47-TR-234R	5.6	2200	1-1/64 dia. x 2-19/32	**4.68**
47-TR-235R	6.75	2200	1-1/64 dia. x 3-1/4	**5.78**
47-TR-236R	8.10	2200	1-1/64 dia. x 3-7/32	**6.85**
47-TR-286§††	8.4	750	1 dia. x 1-15/16	**1.8**
47-TR-289§††	12.6	750	1 dia. x 2-25/64	**3.6**
47-TR-431§	11.2	1000	1 dia. x 2-7/8	**3.6**
47-ZM-9*††	1.4	2400	1/2 dia. x 1-31/32	**.7**
47-ZM-12	1.4	3600	5/8 dia. x 2	**1.3**

*Available in plastic jewel box, add suffix P to Cat. No. †1 tab 1 flat terminal. ‡2 tab terminals. §Snap terminals. ††For use i radio. ‡‡For use in TV tuner. All others for Electronic us

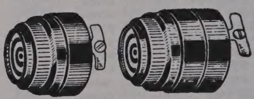
MERCURY POWER-PAK BATTERIES

Multi-cell power-pak batteries are available in various standard sizes for use in geophysical, radiation detection, recording instruments, transceivers and other approved applications requiring specialized power supply requirements. Terminal Types: *Leads. †Special Leads. ††Three negative leads. **Sckt. §Tabs. §§Snaps. ‡Posts. ‡‡Flat.

Cat. No.	Volts	Cap. Ma-Hrs.	Use	Net Ea.
47-302157**	1.35	28,000	Radiation Eqpt.	**$13.50**
47-302250§	9.45	250	Radiation Eqpt.	**3.34**
47-302351‡‡	5.4	2,200	Fire Alarm	**7.23**
47-302358*	10.8	250	Radiation Eqpt.	**4.42**
47-302362*	16.2	250	Radiation Eqpt.	**6.04**
47-302435‡‡	6.75	250	Radiation Eqpt.	**3.73**
47-302462	97.2	1,000	Transmitter "B"	**42.21**
47-302465*	47.25	1,000	Geophysical	**25.91**
47-302478‡‡	9.8	2,400	Recorder	**8.31**
47-302497‡	6.75	2,200	Test Equip.	**10.36**
47-302579*	29.7	250	Test Equip.	**13.50**
47-302580**	27	3,400	Electronic	**36.28**
47-302642‡‡	7.0	2,400	Fire Alarm	**6.15**
47-302651	1.35	14,000	Electronic	**5.18**
47-302702*	2.7	2,200	Geophysical	**4.42**
47-302904*	5.4	3,400	Meter	**8.10**
47-302905*	6.75	3,400	Test Equip.	**9.17**
47-302907*	9.45	3,400	Electronic	**22.88**
47-302908*	10.8	3,400	Radiation Eqpt.	**13.50**
47-303145§§	8.4	3,600	Depth Finder	**8.31**
47-303219‡‡	9.8	175	Electronic	**2.22**
47-303314*	16.8	2,400	Transceiver	**11.56**

MALLORY SONALERT®

ELECTRONIC AUDIBLE SIGNAL



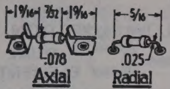
Produces a penetrating, a dible warning signal for u in addition to visual in cators in Military, Industrial, Commercial and Educational field Completely electronic, with solid state circuitry for maximu efficiency, lowest current requirements and highest reliabilit There is no contact arcing, so no r-f noises or mechanical we Molded plastic case with 3/8" long, 1-1/8"-24 threaded collar f mounting on panels up to ¼" thick. Case dia. 1-11/16". Ca length (back of panel) *0.812", others 1.375". Weights: *1.25 o others 2 oz. Terminals for screw, solder or quick disconnect t minations. †Pulsating, 2 to 5 cps. All have silicon transisto

Cat. No.	Sound Output CPS	DB	---Operating-- V-DC	V-AC	Ma.	Ea. 1-24	1-
47-SC628*	2900	68-80	6-28	. . .	3-14	**$5.50**	**$5.**
47-SC628H*	4500	68-80	6-28	. . .	3-14	**6.35**	**6.**
47-SC628P	2900†	68-80†	6-28	. . .	3-14	**9.95**	**10.**
47-SC628A	2900	68-80	6-28	6.28	3-14	**8.75**	**9.**
47-SC110	2900	68-80	30- 110	30- 110	14	**8.75**	**9.**

Prices and delivery for larger quantities available on request.

LITTELFUSE

PICOFUSES

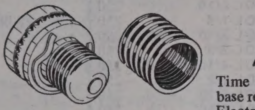


FOR MICRO-ELECTRONIC CIRCUITS

Unique concept in fusing for computer, micro-electronic and aero-space circuits. Designed for circuits of 125 volts or less where short-circuit currents as high as 300 amps occur. Blow time 4 hrs. min. @ 100% rating, 5 secs. max. @ 200% rating. Ceramic bodies. Axial lead types have 1-9/16" leads, radial types have leads 1-3/8" long. *Average cold.

W/Axial Leads	W/Radial Leads	Amps Rating	Ohms Res.*	Net Box/5	Net 100
42-275.125	42-276.125	1/8	2.0	$2.58	$43.00
42-275.250	42-276.250	1/4	.71		
42-275.375	42-276.375	3/8	.43		
42-275.500	42-276.500	1/2	.26		
42-275.750	42-276.750	3/4	.157	2.28	38.00
42-275001	42-276001	1	.125		
42-27501.5	42-27601.5	1½	.074		
42-275002	42-276002	2	.055		
42-275003	42-276003	3	.035		
42-275004	42-276004	4	.022		
42-275005	42-276005	5	.014		

BUSSMANN



FUSTAT FUSES AND ADAPTERS

Time delay fuses with the Type S base recommended by the National Electric Code. They prevent overfusing when used with the proper size adapter. U.L. listed for voltages up to 125. Adapters are not included with Fustat fuses but must be ordered separately. Adapters fit standard fuse receptacles in fuse boxes.

FUSTAT Amps & Cat. No.	Matching Adapter Cat. No.	FUSTAT Amps & Cat. No.	Matching Adapter Cat. No.
183-S3/10	183-SA1*	183-S4-1/2	183-SA5 §
183-S4/10	183-SA1*	183-S5	183-SA5 §
183-S1/2	183-SA1*	183-S5-6/10	183-SA6-1/4#
183-S6/10	183-SA1*	183-S6-1/4	183-SA6-1/4#
183-S8/10	183-SA1*	183-S7	183-SA8
183-S1	183-SA1*	183-S8	183-SA8
183-S1-1/8	183-SA1-1/4*	183-S9	183-SA10Φ
183-S1-1/4	183-SA1-1/4*	183-S10	183-SA10Φ
183-S1-4/10	183-SA1-6/10*	183-S12	183-SA15△
183-S1-8/10	183-SA1-6/10*	183-S14	183-SA15△
183-S2	183-SA2	Net Each $0.25	Net Each $0.17
183-S2-1/4	183-SA2		
183-S2-1/2	183-SA2-1/2†		
183-S2-8/10	183-SA2-1/2†	183-S15	183-SA15△
183-S3-2/10	183-SA3-2/10‡	183-S20	183-SA20
183-S3-1/2	183-SA4	183-S25	183-SA30☆
183-S4	183-SA4	183-S30	183-SA30☆
Net Each $0.25	Net Each $0.17	Net Each $0.22	Net Each $0.17

*Adapter will also take all smaller sizes. † Adapter will also take 2 and 1-8/10 amp sizes. ‡Adapter will also take 2-1/2, 2-1/4, 2, and 1-8/10 amp sizes. §Adapter will also take 4 and 3-1/2 amp sizes. #Adapter will also take 5, 4-1/2, 4, and 3-1/2 amp sizes. ΦAdapter will also take 8 and 7 amp sizes. △Adapter will also take 10, 9, 8 and 7 amp sizes. ☆Adapter will also take 20 amp size.

BUSS FUSETRON

DUAL-ELEMENT PLUG FUSES

Combine a fuse for shorts and a thermal time delay for overloads. Available for 3/10, 4/10, 1/2, 6/10, 8/10, 1, 1-1/8, 1-1/4, 1-4/10, 1-6/10, 1-8/10, 2, 2-1/4, 2-1/2, 2-8/10, 3-2/10, 3-1/2, 4, 4-1/2, 5, 5-6/10, 6-1/4, 7, 8, 9, 10, 12, 14, 15, 20, 25 and 30 amps. When ordering specify Cat. No. 183-T and amperage rating.

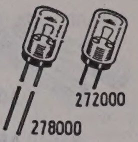
Cat. 183-T	Sizes 0 to 14 amps	**Box of 4, Net $1.00**
Cat. 183-T	15, 20, 25, 30 amps	**Box of 4, Net $0.88**

OTHER BUSS FUSES

CAN BE SUPPLIED FROM STOCK OR ON SPECIAL ORDER. ORDER THEM BY THE BUSS CAT. NO. PRICES AND DELIVERY QUOTED ON REQUEST.

MICROFUSES

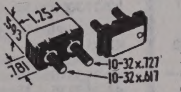
1/4" DIA. x 11/32" HIGH



Sub-miniature fuses designed for use where space is critical. They feature low resistance and high reliability in ultra-fast blowing characteristics and are ideal for printed circuits. Transparent cap permits visual checking. The pig-tail series has 1" wire leads for soldering directly into circuits. The plug-in series fits the Microfuse holders listed below.

PIG-TAIL Cat. No.	PLUG-IN Cat. No.	Max. Amps	V.	Box of 5	Box of 100
42-279.002	42-273.002	1/500	125	$4.71	$78.50
42-279.005	42-273.005	1/200	125		
42-279.010	42-273.010	1/100	125		
42-279.015	42-273.015	1/64	125		
42-279.031	42-273.031	1/32	125		
42-279.050	42-273.050	1/20	125	4.71	78.50
42-279.062	42-273.062	1/16	125		
42-279.100	42-273.100	1/10	125		
42-279.125	42-273.125	1/8	125		
42-279.200	42-273.200	2/10	125		
42-279.250	42-273.250	1/4	125		
42-279.300	42-273.300	3/10	125	4.71	78.50
42-279.400	42-273.400	4/10	125		
42-279.500	42-273.500	1/2	125		
42-279.600	42-273.600	6/10	125		
42-279.700	42-273.700	7/10	125		
42-279.750	42-273.750	3/4	125		
42-279.800	42-273.800	8/10	125		
42-279001	42-273001	1	125	4.71	78.50
42-27901.5	42-27301.5	1½	125		
42-279002	42-273002	2	125		
42-279003	42-273003	3	125		
42-279004	42-273004	4	125		
42-279005	42-273005	5	125		

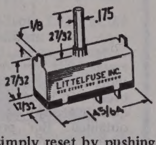
CIRCUIT BREAKERS



6 TO 12 VOLT AUTOMATIC RESET

Bimetal, snap-action switches which open on overloads, and close automatically when overload ceases. Used extensively in electronic and automotive fields to replace fuses.

Cat. No.	Amps	Net Ea.	Box 10	Cat. No.	Amps	Net Ea.	Box 10
42-812005	5	$0.78	$6.50	42-812020	20	$0.78	$6.50
42-812006	6			42-812025	25		
42-812008	8			42-812030	30		
42-812010	10			42-812035	35		
42-812012	12			42-812040	40		
42-812015	15			42-812045	45		
42-812018	18			42-812050	50		

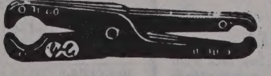


FOR 125 V-AC MANUAL RESET

Dual operate, bi-metallic devices providing temperature compensation over a wide range of ambient temperature variation. Fully enclosed to keep out foreign matter. Under overloads the sensitive breaker opens to protect circuitry. It is simply reset by pushing the button. "Trip Free" feature prevents forced closing while overload condition exists. Safe interrupting capacity 200 amps. Individually carded.

Cat. No.	Trip Amps	Net Ea.	Cat. No.	Trip Amps	Net Ea.
42-8151.75C	1.75	$0.84	42-815003C	3.00	$0.84
42-815002C	2.00		42-8153.25C	3.25	
42-8152.25C	2.25		42-815004C	4.00	
42-8152.5C	2.50		42-81504.5C	4.50	
42-8152.75C	2.75		42-815007C	7.00	

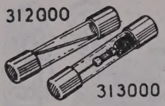
G-C FUSE PULLERS



Provide safe, handy way to remove and replace cartridge fuses. Made of high di-electric material for extra strength.

Cat. 59-5525	For ¼" to ½" dia.	Net $.90
Cat. 59-5526	For ½" to 1½" dia.	Net $1.30

LITTELFUSE



3AG FUSES
1-1/4″ x 1/4″ DIA.

A popular type used in Radio and TV receivers, smplifiers, small household appliances, test equipment, etc. Available in the types ratings and voltages listed below.

REGULAR 312000 SERIES

Cat. No.	Max. Amps	V.	Box of 5	Box of 100
42-312.010	1/100	250	$2.64	$44.00
42-312.031	1/32	250	2.25	37.50
42-312.062	1/16	250	1.14	19.00
42-312.125	1/8	250		
42-312.150	15/100	250		
42-312.175	.175	250		
42-312.187	3/16	250		
42-312.200	2/10	250		
42-312.250	1/4	250	.66	11.00
42-312.300	3/10	250		
42-312.375	3/8	250		
42-312.500	1/2	250		
42-312.600	6/10	250		
42-312.750	3/4	250		
42-312001	1	250	.48	8.00
42-3121.25	1-1/4	250		
42-31201.5	1-1/2	250		
42-31201.6	1-6/10	250		
42-312002	2	250		
42-31202.5	2-1/2	250	.48	8.00
42-312003	3	250		
42-312004	4	250	.57	9.50
42-312005	5	250		
42-312006	6	250		
42-312008	8	125	.81	13.50
42-311004	4	32	.48	8.00
42-311005	5	32	.36	6.00
42-311006	6	32		
42-31107.5	7-1/2	32		
42-311010	10	32		
42-311015	15	32		
42-311025	25	32	.36	6.00
42-311030	30	32		
42-311035	35	32	.36	6.00

INSTRUMENT
8AG FUSES
1″ x 1/4″ DIA.

With high speed action for protecting delicate electronic and electrical equipment. Fuses carry 100% rating for 4 hr. min., 200% for 5 sec. max. Packaged 5 fuses to a box.

Cat. No.	Max. Amps	V.	Box of 5	Box of 100
42-361.002	1/500	250	$7.15	$119.00
42-361.005	1/200	250	3.09	51.50
42-361.010	1/100	250	2.64	44.00
42-361.031	1/32	250	2.25	37.50
42-361.062	1/16	250	1.50	25.00
42-361.100	1/10	250	1.14	19.00
42-361.125	1/8	250		
42-361.187	3/16	250		
42-361.200	2/10	250		
42-361.250	1/4	250	.66	11.00
42-361.375	3/8	250		
42-361.400	4/10	250		
42-361.500	1/2	250		
42-361.750	3/4	250		
42-361001	1	250	.48	8.00
42-361-1.5	1-1/2	250		
42-361002	2	250		
42-361003	3	125		
42-361004	4	125		
42-361005	5	125		

FUSEMASTER

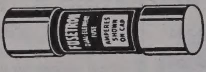
Convenient, wall-mounting fuse rack with 100 (20 boxes) of the most popular fuses used for replacement.

Cat. 42-094047 **Net Ea. $17.92**

SLO-BLO 313000 SERIES

Cat. No.	Max. Amps	V.	Box of 5	Box of 100
42-313.010	1/100	125	$1.98	$33.00
42-313.031	1/32	125		
42-313.062	1/16	125	1.50	25.00
42-313.100	1/10	125		
42-313.125	1/8	125		
42-313.150	15/100	125		
42-313.175	.175	125		
42-313.187	3/16	125		
42-313.200	2/10	125		
42-313.250	1/4	125		
42-313.300	3/10	125		
42-313.375	3/8	125		
42-313.400	4/10	125		
42-313.500	1/2	125		
42-313.600	6/10	125		
42-313.700	7/10	125		
42-313.750	3/4	125		
42-313.800	8/10	125		
42-313001	1	125		
42-31301.2	1-2/10	125	1.41	23.50
42-3131.25	1-1/4	125		
42-31301.5	1-1/2	125		
42-31301.6	1-6/10	125		
42-313002	2	125		
42-31302.5	2-1/2	125	1.14	19.00
42-31302.8	2-8/10	125		
42-313003	3	125		
42-31303.2	3-2/10	125		
42-313004	4	125		
42-313005	5	125		
42-3136.25	6-1/4	32	1.14	19.00
42-313007	7	32		
42-313008	8	32		
42-313010	10	32		
42-313015	15	32		
42-313020	20	32		
42-313025	25	32		
42-313030	30	32		

BUSS FUSETRON



FIBRE TUBE FUSE

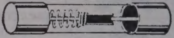
13/32 x 1½”. Dual-element–slow blowing type. Avoid needless blows from starting currents or surges. Have fuse link that operates only on very high overloads or short-circuits, and thermal cutout on low overloads. Thermal cutout cannot operate quickly at any load, hence long time-lag is obtained. Het protection is provided against short-circuits or continued overloads. Carry 110% open at 135% within 1 hour. Blowing time: @ 200% load 25 sec.; @ 300% load 8 sec.; @ 500% load 5 sec.

Cat. No.	Amps Rating	Max. V.	Net Ea.
183-FNM-*	1/10,.15,2/10,3/10,4/10,1/2,6/10,8/10,1,1-1/8,1-1/4,1-4/10,1-6/10,1-8/10,2,2-1/4,2-1/2,2-8/10,3-2/10,3-1/2,4,4-1/2,5,5-6/10,6-1/4,7,8,9,10	250	$0.40
183-FNM-*	12 or 15	125	.40
183-FNM-*	20,25 or 30	32	.40

*Add fuse rating desired to cat. no. when ordering.

BUSS FUSES

SLOW-BLOW FUSETRON



DUAL ELEMENT

1¼” x ¼” diameter. Stop needless blow from starting currents of surges. Fuse lin operates only on very high overloads c short circuits. They cannot operate quickl at any loads so a long time-lag is obtaine yet protection is afforded against shor circuits or continued overloads. Fuse carry 110% rating, open at 135% withi 1 hour, 32-v not UL listed.

MDL FUSES

Blow at 200% load in approx. 25 sec., 300% in 8 sec., at 500% in 3 se

Cat. No.183-	Max. Amps	V.	Box of 5	Bo of 10
MDL-1/100	1/100	250	$1.90	$32.0
MDL-1/32	1/32	250	1.90	32.0
MDL-1/16	1/16	250	1.40	28.0
MDL-1/10	1/10	250		
MDL-1/8	1/8	250		
MDL-.150	.150	250		
MDL-.175	.175	250		
MDL-3/16	3/16	250		
MDL-2/10	2/10	250		
MDL-1/4	1/4	250		
MDL-3/10	3/10	250		
MDL-3/8	3/8	250		
MDL-4/10	4/10	250		
MDL-1/2	1/2	250		
MDL-6/10	6/10	250		
MDL-7/10	7/10	250		
MDL-3/4	3/4	250		
MDL-8/10	8/10	250		
MDL-1	1	250		
MDL-1-2/10	1-2/10	125	1.30	26.0
MDL-1-1/4	1-1/4	125		
MDL-1-1/2	1-1/2	125		
MDL-1-6/10	1-6/10	125		
MDL-2	2	125		
MDL-2-1/2	2-1/2	125	1.00	20.0
MDL-2-8/10	2-8/10	125		
MDL-3	3	32	1.00	20.0
MDL-3-2/10	3-2/10	32		
MDL-4	4	32		
MDL-5	5	32		
MDL-6-1/4	6-1/4	32		
MDL-8	8	32		
MDL-10	10	32		
MDL-15	15	32		
MDL-20	20	32		
MDL-25	25	32		
MDL-30	30	32		

MDX FUSES

Blow at 200% load in approx. 12 sec., 300% in 3 sec., at 500% in ½ se

MDX-1-1/4	1-1/4	250	$1.50	$30.0
MDX-1-1/2	1-1/2	250		
MDX-1-8/10	1-8/10	250		
MDX-2	2	250		
MDX-3	3	125	1.00	20.0
MDX-3-2/10	3-2/10	125		
MDX-4	4	125		
MDX-5	5	125		
MDX-6-1/4	6-1/4	125	1.20	24.0
MDX-7	7	125		

FUSE CADDY
15 POPULAR TYPES

Covers 94% of all Radio and T-V servi requirements. Clear plastic case contai 75 fuses in 15 popular types. 3 spa compartments for additional types. Shi ping weight 12 oz.

Cat. 42-094037 **Net Ea. $12.1**

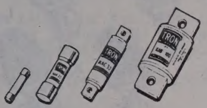
LC FUSE CADDY

Clear plastic box with 75 LC fuses (different types). 3 spare compartmen for additional sizes.

Cat. 42-094041 **Net Ea. $16.5**

FUSES

TRON RECTIFIER FUSES



Especially designed for protection of semiconductor rectifiers, thyristors and other solid state devices. High interrupting capacity and very fast clearing to restrict let-through current and energy to very low values. Give safe short-circuit protection for systems with fault current to 200K/ at 600 volts or less. Carry 100% open at 1000 secs between 150% and 180% of rating; open within 1 sec at 250% of rating.

KAA SERIES

Size: ½" x 13/32" dia. Also available up to 1000 amps; prices on request.

Cat. No.	Amps Rating	Max. V.	Net Ea.
183-KAA-*	½,1,2,3,4,5,6,7, 8,9,10,12,15,20, 25,30	130	**$0.90**
183-KAA-*	70,80,90,100	130	**3.80**

KAB SERIES

Size: 9/16 dia. x 2". Values to 30 amps. 1-7/32 dia. x 3-1/8, values 70 amps to 200 amps. Also available up to 800 amps. Prices on request.

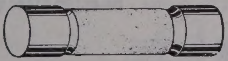
183-KAB-*	½,1,2,3,4,5,6,7, 8,9,10,12,15,17½ 20,25,30	250	**$1.00**
183-KAB-*	35,40,45,50,60	250	**3.69**
183-KAB-*	80,70,90,100, 150,175 or 200	250	**5.13**

KAC SERIES

Size: 2-7/8" x 9/16 dia. Also available up to 800 amps. Prices on request.

183-KAC-*	1,2,3,4,5,6,7, 8,9,10,12,15,17½ 20,25, or 30	600	**$1.36**
183-KAC-*	35,40,45,50,60	600	**3.54**
183-KAC-*	70,80,90,100	600	**4.36**
183-KAC-*	110,125,150,175, 200		**6.79**

Add fuse rating desired to cat. no. when ordering.

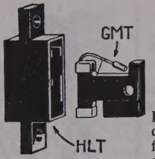


LIMITRON FUSES
HIGH INTERRUPTING CAPACITY

A 600 volt rating in a case size of only 13/32 x 1½". Type KTK fuses are for protection of circuits having fault current capacity up to 100,000 amperes, AC only. U.L. Listed. Test specifications: carry 110% open at 135% in 1 hour or less.

Cat. No.	Amps Rating	Max. V.	Net Ea.
183-KTK-*	1/10,1/8,2/10, 1/4,3/10,1/2,3/ 4,1,1-1/2,2,3,4, 5,6,8,10,15,20, 25,30	600	**$1.12**

*Add fuse rating desired to cat. no when ordering.

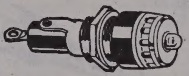


BUSS GMT SIGNAL INDICATING FUSE & MOUNTING

Provides visual indication of a blown fuse by means of a spring-actuated colored plastic flag. Spring also contacts an internal terminal for controlling signal lights, alarms, etc. Fuses are easily replaced. Mountings take only ¼" wide x 1-15/16" high panel space. Fuses carry 100% rating for 10 minutes, open at 150% in 5 minutes. Max. volts 300.

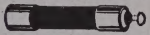
Cat. 183-HLT Mounting **Each $.47**
Box of 10 Net $4.10

Cat. No.	Max. Amps	V.	Net Ea.	Box of 100
183-GMT-.180	.180	300	**$0.48**	**$40.00**
183-GMT-1/4	1/4	300		
183-GMT-1/2	1/2	300		
183-GMT-.650	.650	300		
183-GMT-3/4	3/4	300		
183-GMT-1	1	300		
183-GMT-1-1/3	1-1/3	300		
183-GMT-2	2	300		
183-GMT-3	3	300		
183-GMT-5	5	300		
183-GMT-7-1/2	7-1/2	300		
183-GMT-10	10	300		



BUSS INDICATING FUSE

HOLDER & FUSES

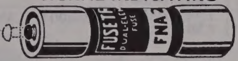


One end of the fuse has a red-capped pin which pops up into the center of the transparent fuse-holder cap when the fuse blows. Bayonet lock cap has retractable fuse retainer. Cap diameter 11/16". Overall holder length 2-9/16". Mounting hole ½" diameter. Fuse size 1¼" x ¼".

Cat. 183-HLD Mounting **Each $.50**

Cat. No.	Max. Amps	V.	Box of 5	Box of 100
183-GBA-3/4	3/4	125	**$2.90**	**$58.00**
183-GBA-1	1	125	**2.90**	**48.00**
183-GBA-1-1/2	1-1/2	125		
183-GBA-2	2	125		
183-GBA-3	3	125		
183-GBA-4	4	125		
183-GBA-5	5	125		

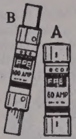
SIGNAL-INDICATING



With silverplated indicating pin that extends when fuse blows. Pin also can be used to actuate a signal by using fuse in signal fuse block. Fuses in sizes larger than 10 amperes have a dual tube construction. They can be used in buss signal fuse blocks.

Cat. No.	Amps Rating	Max. V.	Net Ea.
183-FNA-*	1/10,.15,2/10,3/ 10,4/10,1/2,6/10, 8/10	250	**$0.75**
183-FNA-*	1,1-1/8,1-1/4,1-4/ 10,1-6/10,1-8/10,2, 2-1/4,2-1/2,2-8/10, 3,3-2/10,3-1/2,4,4- 1/2,5,5-6/10,6,6-1/ 4,7,8,10	125	**.75**
183-FNA-*	12 or 15	125	**.84**
183-FNA-*	20,25 or 30	32	**.96**

BUSSMANN
ONE-TIME CARTRIDGE FUSES



For protection against overloads and short circuits in lighting or heating feeder and branch circuits where fault currents will not exceed 10,000 amperes. Design eliminates fuse explosions and protects both personnel and equipment. Listed as standard by UL and CSA Labs. *Add fuse rating to Cat. No. when ordering. †Fuse diameter or blade width.

Fig.	Volts	Amps.	Dia.†	Lgth.
A	250	1 to 30	9/16"	2"
A	250	35 to 60	13/16"	3"
A	600	1 to 30	13/16"	5"
A	600	35 to 60	1-1/16"	5½"
B	250	70 to 100	3/4"	5-7/8"
B	250	110 to 200	1-1/8"	7-1/8"
B	250	225 to 400	1-5/8"	8-5/8"
B	250	450 to 600	2"	10-3/8"
B	600	70 to 100	3/4"	7-7/8"
B	600	110 to 200	1-1/8"	9-5/8"
B	600	225 to 400	1-5/8"	11-5/8"
B	600	450 to 600	2"	13-7/8"

FIG. A. 250 VOLTS

Cat. No.	Amps Rating	Net Ea.
183-NON-*	1,3,6,10,15, 20,25,30	**$0.15**
183-NON-*	35,40,45, 50,60	**.27**

FIG. A. 600 VOLTS

183-NOS-*	1,3,6,10,15, 20,25,30	**.74**
183-NOS-*	35,40,45, 50,60	**1.11**

FIG. B. 250 VOLTS

183-NON-*	70,80,90,100	**1.17**
183-NON-*	110,125,150, 175,200	**2.66**
183-NON-*	225,250,300, 350,400	**4.82**
183-NON-*	450,500,600	**7.28**

FIG. B. 600 VOLTS

183-NOS-*	70,80,90,100	**2.38**
183-NOS-*	110,125,150, 175,200	**4.63**
183-NOS-*	225,250,300, 350,400	**9.25**
183-NOS-*	450,500,600	**13.30**

MIDGET TYPES

For one-time operation. Similar in appearance to Fig. A above but measuring only 13/32" diameter x 1½" long. Fibre sleeve with tightly affixed metal end caps. *Add ampere rating of fuse to Cat. No. when ordering.

FOR 250 VOLTS

Cat. No.	Amps Rating	Net Ea.
183-BAF-*	1,3,6,10,15, 20,25,30	**$0.15**

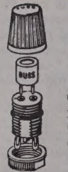
Renewable fuses are also available from LITTELFUSE. Write for descriptive literature, prices and delivery.

MOUNTINGS

FUSE PULLERS

Make it easy and safe to remove and replace fuses even in hard to get at places. Every electrician should have them.

Cat. 183-FP-2	For 13/32" to 13/16" dia. fuses	**Net $0.96**
Cat. 183-FP-3	For 1" to 1-3/4" dia. fuses	**Net $1.12**



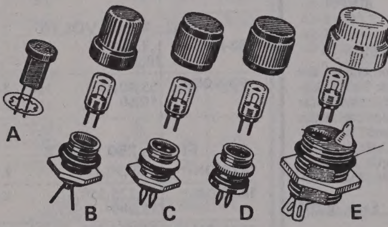
SUBMINIATURE PRONG-TYPE FUSES AND HOLDERS

ONLY .270" x .250"

Offering a light weight, space-saving protective device for space-tight applications in multiple circuit apparatus. GMW fuse has transparent window for visual inspection of element. Fuse may be used alone for mounting into printed circuit boards. HWA holder can be mounted easily or soldered on printed circuit board. AF knob makes holder water-proof from front of panel. Rated 300A at 125 volts. Carry 100%, open @ 200% within 10 sec. or less.

Cat.	Amps	Net	Cat.	Amps	Net
183-GMW-1/200	1/200	$0.83	183-GMW-1/2	1/2	$0.64
183-GMW-1/100	1/100	.83	183-GMW-6/10	6/10	.64
183-GMW-1/64	1/64	.83	183-GMW-3/4	3/4	.64
183-GMW-1/32	1/32	.83	183-GMW-1	1	.64
183-GMW-1/16	1/16	.83	183-GMW-1-1/2	1-1/2	.64
183-GMW-1/10	1/10	.64	183-GMW-2	2	.64
183-GMW-2/10	2/10	.64	183-GMW-3	3	.64
183-GMW-1/4	1/4	.64	183-GMW-4	4	.64
183-GMW-3/10	3/10	.64	183-GMW-5	5	.64
183-GMW-4/10	4/10	.64			

Cat. 183-HWA	Fuseholder only, takes any GMW fuse	**Net $0.68**
Cat. 183-AF	Knob for HWA fuseholder	**Net $0.10**



MICROFUSE HOLDERS

For panel mounting. Type 281001 is for chassis or printed circuit board up to .093" thick. Type 281002 is molded from high strength high dielectric black phenolic, mounts on up to 1/8" thick panels. Types 282001 and 282002 have rugged aluminum cap and body and black neoprene sealing rings. For 1/8" panels.

Cat. No.	See Fig.	Mtg. Hole	O'All Dia.	O'All Ht.	Net Ea.	Box of 100
42-281001	A	.190"	3/8"	29/64"	$0.32	$26.50
42-281002	B	.380"	17/32"	1-1/32"	.90	74.50
42-282001	C	.380"	17/32"	57/64"	1.44	120.00
42-282002	D	.380"	1/2"	61/64"	1.36	113.00

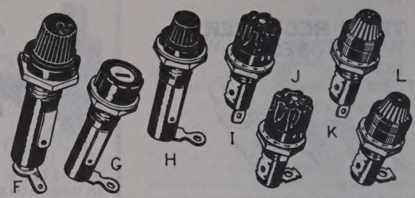
INDICATING MICROFUSE HOLDERS

When the fuse blows the indicating bulb glows and can be seen through the transparent polystyrene cap. Body is high strength, high dielectric black phenolic. Rugged brass terminals. For maximum panel thickness of 3/16". Max. dia. .687". Overall height (including lugs) 1-3/16". Mounting hole .640" diameter.

Cat. No.	See Fig.	Voltage Range	Current Range	Net Ea.	Box of 100
42-284004	E	2½ to 7	1/4 to 5 a.	$2.29	$191.00
42-284005	E	7 to 16	2/10 to 5 a.	2.29	191.00
42-284006	E	16 to 32	1/20 to 5 a.	2.29	191.00
42-284003	E	100 to 130	1/500 to 5 a.	1.70	142.00

MULTIPLE FUSE MOUNTINGS

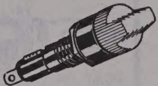
The open type fuse mountings N and P illustrated to the right are available for up to 12 poles. When ordering change the last numeral in the catalog number to indicate the number of poles required. The price will be that of a single pole mounting multiplied by the number of poles ordered.



FUSE EXTRACTOR POSTS

Dead front mountings which require a minimum of space and mak fuse replacement safe and simple. Fig. G has slot for use of coin o screwdriver for removal of portion which extracts fuse. Other have knurled caps for finger operation. Bodies are molded of hig impact black phenolic. Contacts are beryllium copper. Standar rating 15 amps at 250 volts. *D shaped hole.

Cat. No.	See Fig.	For Fuse	Type Knob	Mtg. Hole*	O'All Lgth.	Net Ea.	Box of10
42-341001A	G	3AG	Slot	.505D	2-7/32"	$0.68	$56.0
42-371001A	G	8AG	Slot	.505D	2-7/32"	.68	55.6
42-342001A	H	3AG	Finger	.505D	2-7/32"	.68	56.0
42-372001A	H	8AG	Finger	.505D	2-7/32"	.68	55.6
42-342014A	I	3AG	Finger	.510D	2-5/64"	.47	39.0
42-342022A	L	3AG	Finger	.510D	1-53/64"	.47	39.0
42-342004A	J	3AG	Finger	.510D	1¾"	.47	39.0
42-342012A	K	3AG	Finger	.510D	2-5/32"	.47	39.0
42-442001A	F	4AG	Finger	.635D	2-29/32"	1.38	115.0

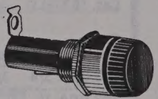


INDICATING POSTS

FOR 1-1/4" x 1/4" FUSES

Cat. No.	Volts Range	Net Ea.	Bo of10
42-344006A	2½-7	$3.28	$274.0
42-344012A	7-16	3.28	274.0
42-344024A	16-32	3.28	274.0
42-344125A	100-125	2.03	169.0
42-344250A	200-250	2.03	169.0

Translucent styrene finger-grip knob covers bulb which lights when fuse is blown. Body molded of high impact black phenolic to MIL-M-14E type CFG specs. Overa length 2-3/8". Mounts in 5/8" "D" hole. Maximum current ratir 20 amps. Furnished with lamp. Order to match circuit operating vo tage.

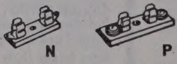


SHOCK-SAFE 3AG FUSEHOLDER

If you're looking for acceptance in Eur pean markets, you'll be looking for shock-safe fuseholder. Only Littlefuse ha it . . . the new "electric shock-safe" fus holder, designed specifically to meet r cent IEC Standards. Accepted by all European countries, IE Publication N. 65 requires that fuseholders offer absolute protectio against electric shock, even under fault conditions. Rated at 2 amperes for any voltage to 300 volts. Maximum mounting pan thickness is 3/16".

Cat. No.	Description	Net 1-99	100-499	50 U
42-345001	Shock-Safe 3AG Fuseholder	$0.85	$0.71	$0.5

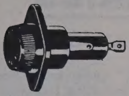
FUSE MOUNTINGS



With fatigue-resistant, nicke plated phosphor-bronze clips. Bas are black phenolic insulating m terial.

Cat. No.	Takes Fuses	See Fig.	Base W. x L.	Net Ea.	Bo of10
42-357001	1 3AG	N	5/8" x 1-5/8"	.26	21.0
42-357002	2 3AG	N	1¼" x 1-5/8"	.42	35.0
42-387001	1 8AG	N	5/8" x 1-3/8"	.26	21.0
42-387002	2 8AG	N	1¼" x 1-3/8"	.42	35.0
42-356001	1 3AG	P	25/32" x 2-3/8"	.44	36.0
42-356002	2 3AG	P	1-11/16" x 2-3/8"	.89	74.0
42-356003	3 3AG	P	2-19/32" x 2-3/8"	1.36	113.0
42-456001	1 4AG	P	25/32" x 2-3/8"	.62	52.0
42-456002	2 4AG	P	1-11/16" x 2-3/8"	1.22	102.0
42-456003	3 4AG	P	2-19/32" x 2-3/8"	1.84	153.0
42-556001	1 5AG	P	27/32" x 2¾"	.69	57.0
42-556002	2 5AG	P	1-13/16" x 2¾"	1.36	113.0
42-556003	3 5AG	P	2-25/32" x 2¾"	2.00	167.0

FUSE HOLDERS



PANEL MOUNTED FUSEHOLDERS

For 13/32 x 1½" fuses. Screw type knob. Molded phenolic body. Normal current carrying capacity for any voltage up to 250.

Cat.		Ea.
183-HPC	For FNM & KTK fuses	**$0.71**

FOR ¼" FUSES

Can be used on panels up to 5/16" thick. Neoprene washer and steel locking nut furnished with each holder. Normal current carrying capacity 30 amps. U.L. listed.

Cat.		Ea.
183-HKP	For ABC, AGC, SFE20, MDL, MDX, MTH fuses	**$0.46**

LAMP INDICATING FUSEHOLDERS

For panel mounting ¼ x 1¼" fuses. Molded phenolic body. Transparent knob permits indicating light to be readily seen. Circuit voltage: 90 to 250. Max. amp rating: 20. Neon type lamp. Model HKLX has parallel flat-sided knob for positive finger grip.

Cat. 183-HKL **Net Ea.**
Cat. 183-HKL-X **$1.93**

FUSE CLIPS

For holding fuses, semiconductors, transistors, etc. Equipped with "ears" to center fuse. Plated with silver for low resistance.

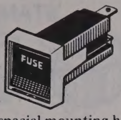
BERYLLIUM COPPER

Cat. No.	Fuse Dia.	Hole Dia.	Net Ea.	Box of 100
42-121001	¼"	.131"	**$0.07**	**$5.50**
42-123001	9/32"	.171"	**.12**	**9.50**
42-125001	13/32"	.196"	**.18**	**15.00**
42-127001	9/16"	.203"	**.42**	**35.00**
42-129001	13/16"	.265"	**1.00**	**83.00**

PHOSPHOR BRONZE

Cat. No.	Fuse Dia.	Hole Dia.	Net Ea.	Box of 100
42-101001	¼"	.131"	**$0.04**	**$2.80**
42-103001	9/32"	.171"	**.05**	**3.60**
42-105001	13/32"	.196"	**.08**	**6.50**
42-107001	9/16"	.203"	**.09**	**7.50**
42-109001	13/16"	.265"	**.35**	**28.50**

Phosphor bronze clips nickel plated.



PANEL FUSEHOLDERS

A new series of low profile square cap fuseholders that eliminate the need for special mounting hardware. The fuseholder is recognized by U.L., Inc. for operation at 15 amp 250 V. max. The Littlefuse 348 Series accommodates standard 3AG fuse. The 347 Series is designed to accept a 3AG indicating pin type fuse. Either series is available with 3/16" or ¼" wide quick connect and solder type terminals. Fuse insertion and removal is quick and easy. Press on the cap and it opens . . . insert the fuse and press again to "snap lock" it back into place. *Indicates bezel color, insert no. from color code. †Indicates cap color, insert no. from color code. Color Code: Red: 1, Green: 2, Yellow: 3, Blue: 4, White: 5, Black: 7, and Grey: 9.

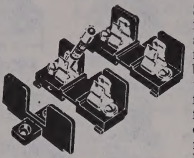
Cat. No.	Terminal Width	Net 1-99	100-499	500-Up
42-3476*†	3/16"	**$0.74**	**$0.62**	**$0.50**
42-3478*†	1/4"	**.74**	**.62**	**.50**
42-3486*†	3/16"	**.72**	**.60**	**.48**
42-3488*†	1/4"	**.72**	**.60**	**.48**

FUSE BLOCKS

For rectifier protection type fuses above.

Cat. No.	Type	For Fuse Type & (Amperes)	Net Ea.
183-4515	1 pole	KAA (1-30)	**$0.64**
183-4525	2 pole	KAA (1-30)	**1.21**
183-4535	3 pole	KAA (1-30)	**1.80**
183-3575	1 pole	KAA (70-400)	**1.97**
183-3560	3 pole	KAA (70-400)	**5.91**
183-4386	1 pole	KAB (1-30)	**.91**
183-4287	2 pole	KAB (1-30)	**1.81**
183-3959	3 pole	KAB (1-30)	**2.66**
183-3531	1 pole	KAB (35-60)	**1.87**
183-3604	3 pole	KAB (35-60)	**6.34**
183-3556	1 pole	KAB (70-200)	**2.17**
183-3521	3 pole	KAB (70-200)	**6.50**
183-3595	1 pole	KBC (1-30)	**1.58**
183-3528	2 pole	KAC (1-30)	**3.15**
183-3525	3 pole	KAC (1-30)	**4.73**
183-3571	1 pole	KAC (35-60)	**2.27**
183-3513	3 pole	KAC (35-60)	**6.70**
183-3594	1 pole	KAC (70-100)	**2.76**
183-3523	3 pole	KAC (70-100)	**7.88**
183-3591	1 pole	KAC (110-200)	**2.76**
183-3512	3 pole	KAC (110-200)	**8.27**

BUSS ADD-ON BLOCKS FOR 13/32" x 1-1/2" FUSES



Single-pole fuse blocks and separate end barriers that join to form a unit fuse block of one or more poles. Each single pole section nests and locks into the next section to form a solid block. New sections may be added at any time. No retaining rods or channel strips required. Special clips permit one end of fuse to be raised and locked into vertical position for circuit disconnect. A marking strip snap-locks into base for circuit identification. A complete assembly consists of one end barrier and any number of 1-pole fuse blocks. *50" long.

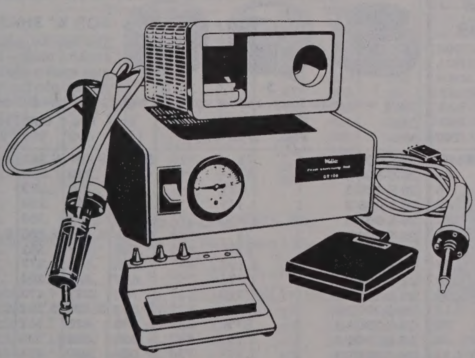
Cat. No.	Mounting Part	Net Ea.	Box of 10
183-3743	1-pole block	**$0.95**	**$8.00**
183-3742	End barrier	**.14**	**1.20**
183-Strip*	Marker strip	**.44**	**3.70**

BUSS MOUNTINGS

Bakelite base with sturdy fuse clips and heavy screw terminals. Available for fuses of various lengths as listed below. Prices for more than 3-pole units on request.

Cat. No.	Use For	Fuse Size	Net Ea.	Box of 10
183-4514	1-pole	¼"	**$0.42**	**$4.20**
183-4524	2-pole	x	**.82**	**8.20**
183-4534	3-pole	1"	**1.23**	**12.30**
183-4512	1-pole	¼"	**.42**	**4.20**
183-4522	2-pole	x	**.82**	**8.20**
183-4532	3-pole	1¼"	**1.23**	**12.30**
183-4513	1-pole	¼"	**.58**	**5.80**
183-4523	2-pole	x	**1.06**	**10.60**
183-4533	3-pole	1-7/16"	**1.55**	**15.50**
183-4481	1-pole	9/32"	**.58**	**5.80**
183-4482	2-pole	x	**1.06**	**10.60**
183-4483	3-pole	1¼"	**1.55**	**15.50**
183-4515	1-pole	13/32"	**.64**	**6.40**
183-4525	2-pole	x	**1.21**	**12.10**
183-4535	3-pole	1½"	**1.80**	**18.10**

WELLER SOLDERING STATION



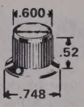
MODEL DS100

The new Weller power vacuum desoldering station is especially for printed circuit board repair. Famous Weller closed loop temperature control protects sensitive components while soldering or desoldering. See-thru solder collector is easy to clean or replace. Non-burnable cord set affords safety and longer life. Low voltage tool inputs give added safety margins. High impact resistant tool handles and stainless steel barrels mean longer tool usage. Operates from factory air and line voltage. Complete with foot switch, indicating light/on-off switch, twin safety tool holder, vacuum adjustment and gage, tip and sponge holder, five assorted tips and instructions. Color: new beige with cool blue tool handles.

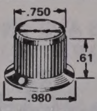
Cat. No.	Description	Net Each
92-DS100	Complete unit	**$225.00**
92-DS101	Soldering iron	**14.65**
92-DS102	Desoldering iron	**19.00**

Replacement tiplets and other related parts are available for the DS100 Station. Ask for Weller's latest catalog.

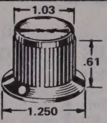
ALCO KNOBS



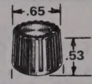
PK-50B



PK-70B



PK-90B



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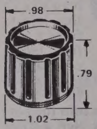
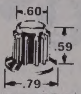
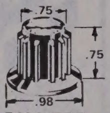


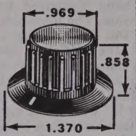
PK-1108



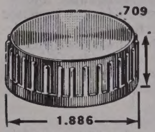
PKA-50B



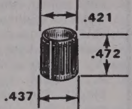
PKA-70B



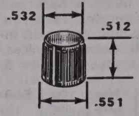
PKA-90B



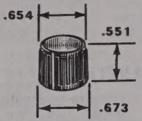
PKA-190B



PKG-40B



PKG-50B



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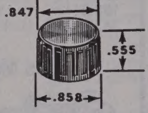
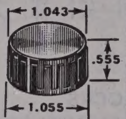
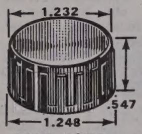


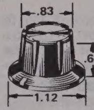
PKG-80B



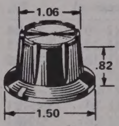
PKG-100B



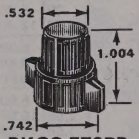
PKG-125B



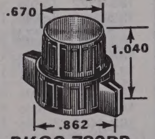
PKB-70B



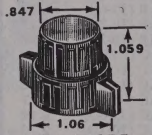
PKB-90B



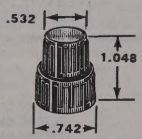
PKGC-570BP



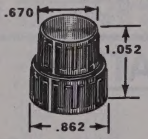
PKGC-780BP



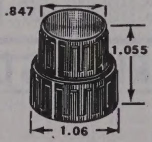
PKGC-810BP



PKGC-570B



PKGC-780B



PKGC-810B

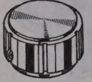
Available in black plastic, each knob features an attractive spun aluminum cap plate thereby offering a pleasing two-tone effect. Equipped with molded-in brass bushing and standard 6/32 set screw indicating dot or hair line provided. -10 suffix indicates skirted. *Indicates 1/8" shaft, all others 1/4" shaft. R indicates Red.

Cat. No. 448- ★	Net 1-99	100-249	Cat. No. 448- ★	Net 1-99	100-249
PK-1100B	$0.35	$0.32	PKA-190B	$1.85	$1.67
PK-1100B-1/8*	.35	.32	PKG-40B-1/8*	.45	.41
PK-1100R-1/8*	.40	.36	PKG-50B	.50	.45
PK-1108	.45	.41	PKG-50B-1/8*	.50	.45
PK-50B	.25	.23	PKG-70B	.55	.50
PK-50B-1/8*	.25	.23	PKG-80B	.60	.54
PK-70B	.30	.27	PKG-100B	.70	.63
PK-90B	.35	.32	PKG-125B	.90	.81
PKB-70B	.40	.36	PKGC-570BP	1.05	.95
PKB-90B	.50	.45	PKGC-780BP	1.10	.99
PKA-50B-1/8*	.35	.32	PKGC-810BP	1.25	1.13
PKA-50B	.35	.32	PKGC-570B	1.00	.90
PKA-70B	.40	.36	PKGC-780B	1.05	.95
PKA-90B	.60	.54	PKGC-810B	1.25	1.13

★Include complete Cat. No. when ordering, i.e. 448-PK-1100B.

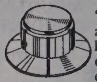
ALCO "K" SERIES

STANDARD ALUMINUM KNOBS



A

B



C

"K" Series knobs ar a matching family o knobs in four basi diameters to enhanc equipment appearance Each knob is machined from one-piece aluminum and then anodized in natural a uminum finish with a black indicator line. Knobs lock to the shaf by means of Allen set screw.

STANDARD. FIG. A.

Cat. No.	Shaft Dia.	Knob Dia.	Knob Ht.	Ea. 1-99	100-249	250-499	500 99
448-K-500A	.250"	.500"	.625"	$0.65	$0.59	$0.56	$0.5
448-K-700A	.250"	.750"	.625"	.70	.63	.60	.5
448-K-900A	.250"	.937"	.625"	.80	.72	.68	.6
448-K-1250A	.250"	1.250"	.750"	1.05	.95	.89	.8

WITH DIAMOND KNURL. FIG. B.

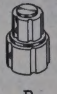
Cat. No.	Shaft Dia.	Knob Dia.	Knob Ht.	Ea. 1-99	100-249	250-499	500 99
448-KD-500A	.250"	.500"	.625"	$0.75	$0.68	$0.64	$0.6
448-KD-700A	.250"	.750"	.625"	.80	.72	.68	.6
448-KD-900A	.250"	.937"	.625"	.95	.85	.82	.7
448-KD-1250A	.250"	1.250"	.750"	1.15	1.04	.98	.9

WITH ALUMINUM SKIRT. FIG. C.

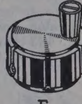
Cat. No.	Shaft Dia.	Knob Dia.	Skirt Dia.	Knob Ht.	Ea. 1-99	100-249	25 49
448-KS-500A	.250"	.500"	.750"	.625"	$0.85	$0.77	$0.7
448-KS-700A	.250"	.750"	1.125"	.625"	.95	.85	.8
448-KS-900A	.250"	.937"	1.406"	.625"	1.10	.99	.9

CONCENTRIC KNOBS FIG. D

For concentric shaft controls. The upper knob is .500" in diameter, and takes a .125" diameter shaft. The lower knob is .750" in diameter and takes a .250" diameter shaft. Natural anodized aluminum finish.



D



E

Cat. No.	Description	Ea. 1-99	100-249	250-499	50 99
448-K-5700A	Concentric knobs	$1.50	$1.35	$1.28	$1.2

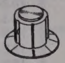
SPINNER NOB. FIG. E.

This is a standard knob with .500" long spinner knob attached f fast turning. Natural anodized aluminum finish.

Cat. No.	Shaft Dia.	Knob Dia.	Knob Ht.	Ea. 1-99	100-249	250-499	50 99
448-K-1250AS	.250"	1.250"	.750"	$1.55	$1.40	$1.23	$1.2

G

F



H

MINIATURE KNOBS FOR .125" SHAFT

.500" diameter natural anodized al minum knobs which match the larg series.

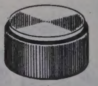
Cat. No.	See Fig.	Type Knob	Ea. 1-99	100-249	250-499	50 99
448-K-500A-1/8	F	Standard	$0.65	$0.59	$0.56	$0.5
448-KD-500A-1/8	G	Diamond Knurl	.75	.68	.64	.
448-KS-500A-1/8	H	Skirted	.85	.77	.73	.

KURZ-KASCH

SNOB KNOBS

1

2



3

FOR ¼" SHAFT

The new Kurz-Kas knobs made wi high quality therm setting plastic, co plete with brass insert and set screw for high torque conditions.

Cat. No.	See Fig.	O'all Size		Ea. 1-99	100-499	500-999	100 24
26-S-903-3	1	.75	.625	$.374	$.280	$.261	$.1
26-S-904-3	1	.875	.625	.400	.299	.279	.2
26-S-905-3	1	1.125	.687	.418	.314	.293	.2
26-S-906-3	1	1.375	.750	.444	.333	.289	.2
26-S-907-3	1	1.750	.812	.538	.403	.350	.2
26-S-1903-3	2	.75	.625	$.532	$.399	$.266	$.2
26-S-1904-3	2	.875	.625	.556	.418	.362	.2
26-S-1905-3	2	1.125	.687	.580	.435	.377	.2
26-S-1906-3	2	1.375	.750	.622	.466	.404	.3
26-S-1907-3	2	1.750	.812	.783	.553	.479	.3
26-S-2903-3	3	.75	.625	$.542	$.406	$.352	$.2
26-S-2904-3	3	.875	.625	.568	.425	.367	.2
26-S-2905-3	3	1.125	.687	.606	.456	.395	.3
26-S-2906-3	3	1.375	.750	.564	.490	.424	.3
26-S-2907-3	3	1.750	.812	.790	.582	.513	.3

SMITH SHAFTS & ACCESSORIES

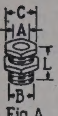


Fig. A

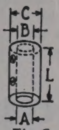


Fig. C

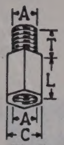


Fig. D

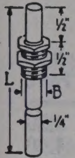


Fig. B

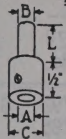


Fig. E

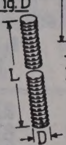


Fig. G

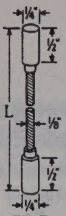


Fig. F

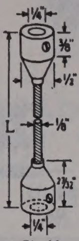


Fig. H

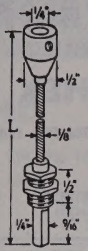


Fig. I

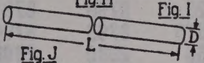


Fig. J

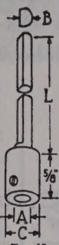


Fig. K

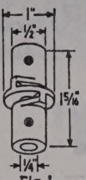


Fig. L

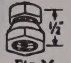


Fig. M

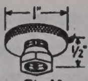


Fig. N

PANEL BEARINGS (A)

Made of nickel-plated brass.

Cat. No.	A	C	L	B	Ea. 1-499	500-999	1000-2499
242-119	¼"	7/16"	1/2"	3/8"-32	$0.17	$0.153	$0.145
242-184	1/8"	11/32"	3/8"	1/4"-32	.17	.153	.145

SHAFT COUPLINGS (C)

Nickel-plated brass with 2 set screws. *With 4 set screws.

Cat. No.	A	B	C	L	Ea. 1-499	500-999	1000-2499
242-120	1/4"	1/4"	7/16"	3/4"	$0.33	$0.297	$0.280
242-131	3/8"	1/4"	1/2"	3/4"	.33	.297	.280
242-133	3/8"	3/8"	1/2"	3/4"	.33	.297	.280
242-138*	1/4"	1/4"	7/16"	3/4"	.39	.351	.3315
242-180	1/8"	1/8"	9/32"	3/8"			
Made of black fibre. 2 set screws.							
242-140	1/4"	1/4"	7/16"	3/4"	.33	.297	.280
242-141	3/8"	1/4"	1/2"	3/4"	.33	.297	.280
242-142	3/8"	3/8"	1/2"	3/4"	.33	.297	.280

SHAFT EXTENSIONS (E)

Nickel-plated brass with 1 set screw.

Cat. No.	A	B	C	L	Ea. 1-499	500-999	1000-2499
242-150	1/4"	1/4"	1/2"	1¼"	$0.44	$0.396	$0.374
242-132	3/8"	1/4"	1/2"	1¼"	.44	.396	.374
242-160	1/4"	1/4"	1/2"	5/8"	.39	.351	.3315
242-162	3/8"	1/4"	1/2"	5/8"	.39	.351	.3315
242-189	1/8"	1/8"	9/32"	3/8"	.39	.351	.3315
Made of black fibre. 1 set screw.							
242-130	1/4"	1/4"	1/2"	1¼"	.44	.396	.374
242-134	3/8"	1/4"	1/2"	1¼"	.44	.396	.374
242-161	1/4"	1/4"	1/2"	5/8"	.39	.351	.3315
242-163	3/8"	1/4"	1/2"	5/8"	.39	.351	.3315

SHAFT EXTENDERS (K)

For volume controls. Nickel-plated brass with 1 set screw.

Cat. No.	A	B	C	L	Ea. 1-499	500-999	1000-2499
242-2356	¼"	.250"	7/16"	2"	$0.37	$0.333	$0.315
242-2357	¼"	.250"	7/16"	3"	.38	.342	.323
242-2358	¼"	.250"	7/16"	4"	.40	.360	.340
242-2359	¼"	.219"	7/16"	2"	.41	.369	.349
242-2360	¼"	.219"	7/16"	3"	.44	.396	.374
242-2361	¼"	.219"	7/16"	4"	.55	.495	.468
242-2362	¼"	.156"	7/16"	2"	.41	.369	.349
242-2363	¼"	.156"	7/16"	3"	.44	.396	.374
242-2364	¼"	.156"	7/16"	4"	.55	.495	.468
5-444	¼"	.156"	7/16"	8"	.90	....	....

BUSHING EXTENDERS (D)

For volume controls, switches, etc. Nickel-plated brass.

Cat. No.	A	C	L	T	Ea. 1-499	500-999	1000-2499
242-2350	3/8"-32	½"	5/8"	3/16"	$0.31	$0.279	$0.264
242-2351	3/8"-32	½"	5/8"	1/4"	.37	.333	.315
242-2352	3/8"-32	½"	5/8"	3/8"	.40	.360	.340
242-2353	3/8"-32	½"	11/16"	3/8"	.42	.378	.357
242-2354	3/8"-32	½"	11/16"	1/2"	.43	.387	.366
242-2355	3/8"-32	½"	3/4"	1/4"	.44	.396	.374

NYLON FLEXIBLE COUPLING (L)

A one-piece molded Nylon unit with molded-in brass bushings with Allen head set screws. For use with ¼" dia. shafts.

Cat.	1-499
242-164	Ea. $1.65

SHAFT LOCKS

For locking the shafts of volume controls, capacitors, padders, etc. Fastens on the mounting bushing of the control. A split bushing locks the shaft when nut is tightened. Made of nickel-plated brass.

Cat. No.	See Fig.	Control Bushing	Shaft Dia.	Ea. 1-499	500-999	1000-2499
242-181	M	3/8"-32	1/4"	$0.33	$0.297	$0.280
242-183	M	1/4"-32	1/8"	.22	.198	.187
242-182	N	3/8"-32	1/4"	.55	.495	.468

PANEL BEARING ASSEMBLIES

Both styles use the Type 119 Panel Bearing listed at the left.

Cat. No.	See Fig.	Shaft Type	L.	B.	Ea. 1-499	500-999	1000-2499
242-148	B	Rigid	3"	3/8"-32	$0.44	$0.396	$0.374
242-149	B	Rigid	6"	3/8"-32	.60	.540	.510
242-165	I	Flex.	4-1/16"	3/8"-32	1.60	1.440	1.360
242-166	I	Flex.	7-1/16"	3/8"-32	1.71	1.539	1.454

FLEXIBLE SHAFTS

For out-of-line shaft drives. High quality non-magnetic phosphor bronze, non-rusting flexible shaft. Nickel-plated brass parts.

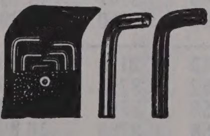
Cat. No.	See Fig.	Equipped With	L.	Ea. 1-499	500-999	1000-2499
242-151	F	¼" hubs	3"	$0.83	$0.747	$0.706
242-152	F	¼" hubs	6"	.94	.846	.799
242-153	H	¼" couplers	3-5/8"	1.32	1.188	1.112
242-154	H	¼" couplers	6-5/8"	1.38	1.242	1.173

PLAIN RODS (J)

Cat. No.	Made Of	Dia.	L.	Ea. 1-499	500-999	1000-2499
242-1404	Brass, N.P.	¼"	6"	$0.45	$0.405	$0.383
242-1405	Brass, N.P.	¼"	12"	.90	.810	.765
242-1406	Fibre	¼"	6"	.15	.135	.128
242-1407	Fibre	¼"	12"	.30	.270	.255
242-1408	Nylon	¼"	6"	.35	.315	.298
242-1409	Nylon	¼"	12"	.70	.630	.595

THREADED RODS (G)

BRASS 1 Ft. Length				BRASS 2 Ft. Length		
Cat. No.	Ea. 1-499	500-999	Thd. Size	Cat. No.	Ea. 1-499	500-999
242-1400-1	$0.60	$0.540	6-32	242-1400-2	$1.10	$0.990
242-1401-1	.60	.540	8-32	242-1401-2	1.10	.990
242-1402-1	.60	.540	10-32	242-1402-2	1.10	.990
242-1403-1	.65	.585	¼"-20	242-1403-2	1.20	1.080
NYLON				NYLON		
242-1420-1	1.10	.990	6-32	242-1420-2	2.20	1.980
242-1421-1	1.20	1.080	8-32	242-1421-2	2.40	2.160
242-1422-1	1.50	1.350	10-32	242-1422-2	3.00	2.700
242-1423-1	1.80	1.620	¼"-20	242-1423-2	3.60	3.240



KEY WRENCHES

For the set screws used on knobs, dials, shafts, pulleys, motors, etc. Made of hardened alloy steel in the sizes as listed below. In handy plastic containers.

Cat. 242-355	6 Hexagon #3 to 5/16"	Net $0.66
Cat. 242-385	6 Splin #5 to 5/16"	Net $ .66
Cat. 242-395	11 Ass't. Hex and Splin	Net $1.30

Herman H. Smith

BRASS SPACERS

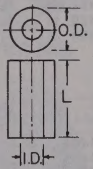
CADMIUM PLATED

ROUND

Std. Pkg. 100

1/4" O.D.

Length "L"	CLEARANCE HOLE #4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per C
.125	8700	8701	8702	$ 4.10
.1875	8703	8704	8705	4.30
.250	2340	2100	2105	4.60
.3125	8706	8707	8708	5.20
.375	2341	2101	2106	5.40
.4375	8709	8710	8711	$ 5.80
.500	2342	2102	2107	6.30
.5625	8712	8713	8714	6.80
.625	8715	8716	8717	7.30
.6875	8718	8719	8720	8.90
.750	2343	2103	2108	$ 9.00
.8125	8721	8722	8723	9.20
.875	8724	8725	8726	10.00
.9375	8727	8728	8729	10.20
1.000	2344	2104	2109	10.70



3/8" O.D.

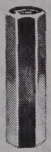
Length "L"	CLEARANCE HOLE #4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per C
.125	8730	8731	8732	$ 6.60
.1875	8733	8734	8735	7.30
.250	2345	2110	2115	8.00
.3125	8736	8737	8738	8.60
.375	2346	2111	2116	9.60
.4375	8739	8740	8741	$10.40
.500	2347	2112	2117	11.60
.5625	8742	8743	8744	12.10
.625	8745	8746	8747	13.10
.6875	8748	8749	8750	13.30
.750	2348	2113	2118	$13.40
.8125	8751	8752	8753	14.90
.875	8754	8755	8756	16.30
.9375	8757	8758	8759	16.80
1.000	2349	2114	2119	18.40

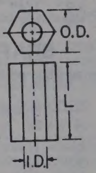
HEX

Std. Pkg. 100

1/4" HEX

Length "L"	CLEARANCE HOLE #4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per C
.125	8790	8791	8792	$ 4.20
.1875	8793	8794	8795	4.40
.250	2380	2300	2305	4.70
.3125	8796	8797	8798	5.70
.375	2381	2301	2306	5.90
.4375	8799	8800	8801	$ 6.20
.500	2382	2302	2307	6.40
.5625	8802	8803	8804	7.00
.625	8805	8806	8807	7.40
.6875	8808	8809	8810	9.00
.750	2383	2303	2308	$ 9.40
.8125	8811	8812	8813	9.70
.875	8814	8815	8816	10.10
.9375	8817	8818	8819	10.60
1.000	2384	2304	2309	10.90





3/8" HEX

Length "L"	CLEARANCE HOLE #4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per C
.125	8850	8851	8852	$ 6.80
.1875	8853	8854	8855	7.50
.250	2385	2310	2315	8.10
.3125	8856	8857	8858	8.90
.375	2386	2311	2316	9.90
.4375	8859	8860	8861	$11.10
.500	2387	2312	2317	12.10
.5625	8862	8863	8864	13.30
.625	8865	8866	8867	14.90
.6875	8868	8869	8870	15.00
.750	2388	2313	2318	$15.80
.8125	8871	8872	8873	16.70
.875	8874	8875	8876	18.40
.9375	8877	8878	8879	18.70
1.000	2389	2314	2319	20.50

*On Threaded Spacers over 1" the tap is 3/8" from each end and not continuous through.

Herman H. Smith

BRASS SPACERS

CADMIUM PLATED

ROUND THREADED

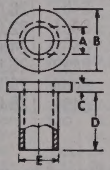
1/4" O.D. Std. Pkg. 100

Length "L"	4-40 No.	6-32 No.	8-32 No.	NET Per C
.125	8760	8761	8762	$ 4.70
.1875	8763	8764	8765	5.10
.250	2370	2120	2125	5.30
.3125	8766	8767	8768	5.80
.375	2371	2121	2126	6.20
.4375	8769	8770	8771	$ 6.50
.500	2372	2122	2127	7.40
.5625	8772	8773	8774	7.90
.625	8775	8776	8777	8.70
.6875	8778	8779	8780	10.10
.750	2373	2123	2128	$11.20
.8125	8781	8782	8783	11.60
.875	8784	8785	8786	11.90
.9375	8787	8788	8789	12.10
1.000	2374	2124	2129	12.60

HEX THREADED

1/4" HEX Std. Pkg. 100

Length "L"	4-40 No.	6-32 No.	8-32 No.	NET Per C
.125	8820	8821	8822	$ 5.00
.1875	8823	8824	8825	5.30
.250	2330	2320	2325	5.80
.3125	8826	8827	8828	6.20
.375	2331	2321	2326	7.20
.4375	8829	8830	8831	$ 7.40
.500	2332	2322	2327	8.10
.5625	8832	8833	8834	8.90
.625	8835	8836	8837	9.40
.6875	8838	8839	8840	12.10
.750	2333	2323	2328	$12.30
.8125	8841	8842	8843	12.40
.875	8844	8845	8846	12.80
.9375	8847	8848	8849	12.90
1.000	2334	2324	2329	13.30



NYLON SPACER BUSHINGS

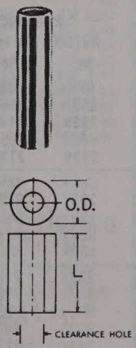
Natural Color, MIL-P-20693A. Std. Pkg. 100

No.	I.D. (A)	B	C	D	E	NET Per C
2534	#4 (.115)	.235	3/64	1/4	.147	$2.30
2535	#6 (.140)	.290	3/64	1/4	.170	2.40
2536	#8 (.170)	.344	1/16	3/8	.205	2.50
2537	#10 (.200)	.399	1/16	3/8	.260	2.70
2538	1/4" (.260)	.513	1/16	3/8	.312	3.00

NYLON SPACERS

1/4" O.D.

Non-conductive and molded of corrosive resistant Nylon. Useful for a wide variety of applications as well as for bushings, bearings, rollers and glides. Available in Natural finish, 1/4" O.D. in various clearance hole diameters.



— CLEARANCE HOLE — Std. Pkg. 100

Length	#4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per C
.125	4000	4001	4002	$ 3.30
.187	4003	4004	4005	3.80
.250	4006	4007	4008	4.30
.312	4009	4010	4011	4.90
.375	4012	4013	4014	5.50
.437	4015	4016	4017	6.00
.500	4018	4019	4020	6.50
.562	4021	4022	4023	7.00
.625	4024	4025	4026	7.50
.687	4027	4028	4029	8.00
.750	4030	4031	4032	8.50
.812	4033	4034	4035	8.80
.875	4036	4037	4038	9.30
.937	4039	4040	4041	9.70
1.000	4042	4043	4044	10.00

ALUMINUM SPACERS

Irridite 14-2 per MIL-C-5541 Std. Pkg. 100

ROUND

1/4" O.D. — **5/16" O.D.**

LENGTH "L"	CLEARANCE HOLE #4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per C	CLEAR. #10(.200) No.	NET Per C
.125	8480	8500	8520	$ 5.00	8540	$ 7.00
.250	8481	8501	8521	6.00	8541	8.00
.375	8482	8502	8522	7.00	8542	9.00
.500	8483	8503	8523	8.00	8543	10.00
.625	8484	8504	8524	9.00	8544	11.00
.750	8485	8505	8525	10.00	8545	12.00
.875	8486	8506	8526	11.00	8546	13.00
1.000	8487	8507	8527	12.00	8547	14.00
1.250	8488	8508	8528	13.00	8548	15.00
1.500	8489	8509	8529	24.00	8549	27.00
1.750	8490	8510	8530	25.00	8550	28.00
2.000	8491	8511	8531	26.00	8551	29.00
2.50	8492	8512	8532	27.00	8552	30.00
3.00	8493	8513	8533	28.00	8553	31.00
3.50	8494	8514	8534	32.00	8554	32.00
4.00	8495	8515	8535	37.00	8555	33.00
5.00	8496	8516	8536	38.00	8556	34.00
6.00	8497	8517	8537	48.00	8557	35.00

ROUND THREADED

LENGTH "L"	4-40 No.	6-32 No.	8-32 No.	NET Per C	10-32 No.	NET Per C
.125	8320	8340	8360	$ 6.00	8380	$ 8.00
.250	8321	8341	8361	7.00	8381	9.00
.375	8322	8342	8362	8.00	8382	10.00
.500	8323	8343	8363	9.00	8383	11.00
.625	8324	8344	8364	10.00	8384	12.00
.750	8325	8345	8365	11.00	8385	13.00
.875	8326	8346	8366	12.00	8386	14.00
1.000	8327	8347	8367	14.00	8387	15.00
1.250	8328	8348	8368	16.00	8388	16.00
1.500	8329	8349	8369	18.00	8389	18.00
1.750	8330	8350	8370	20.00	8390	20.00
2.00	8331	8351	8371	22.00	8391	22.00
2.50	8332	8352	8372	24.00	8392	24.00
3.00	8333	8353	8373	26.00	8393	26.00
3.50	8334	8354	8374	28.00	8394	28.00
4.00	8335	8355	8375	36.00	8395	30.00

HEX

1/4" O.D. — **5/16" O.D.**

LENGTH "L"	CLEARANCE HOLE #4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per C	CLEAR. #10(.200) No.	NET Per C
.125	8560	8580	8600	$ 6.00	8620	$ 9.00
.250	8561	8581	8601	7.00	8621	10.00
.375	8562	8582	8602	8.00	8622	11.00
.500	8563	8583	8603	9.00	8623	12.00
.625	8564	8584	8604	10.00	8624	13.00
.750	8565	8585	8605	11.00	8625	14.00
.875	8566	8586	8606	12.00	8626	15.00
1.000	8567	8587	8607	13.00	8627	16.00
1.250	8568	8588	8608	24.00	8628	27.00
1.500	8569	8589	8609	25.00	8629	28.00
1.750	8570	8590	8610	26.00	8630	29.00
2.00	8571	8591	8611	27.00	8631	30.00

HEX THREADED

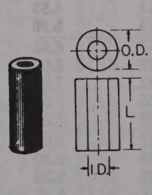
LENGTH "L"	4-40 No.	6-32 No.	8-32 No.	NET Per C	10-32 No.	NET Per C
.125	8400	8420	8440	$ 7.00	8460	$10.00
.250	8401	8421	8441	8.00	8461	11.00
.375	8402	8422	8442	9.00	8462	12.00
.500	8403	8423	8443	10.00	8463	13.00
.625	8404	8424	8444	11.00	8464	14.00
.750	8405	8425	8445	12.00	8465	15.00
.875	8406	8426	8446	13.00	8466	16.00
1.000	8407	8427	8447	14.00	8467	17.00
1.250	8408	8428	8448	16.00	8468	19.00
1.500	8409	8429	8449	18.00	8469	21.00
1.750	8410	8430	8450	20.00	8470	23.00
2.00	8411	8431	8451	22.00	8471	25.00
2.50	8412	8432	8452	24.00	8472	27.00
3.00	8413	8433	8453	26.00	8473	29.00
3.50	8414	8434	8454	28.00	8474	31.00
4.00	8415	8435	8455	35.00	8475	33.00

* On Threaded Spacers over 1" the tap is 3/8" from each end and not continuous through.

FIBRE SPACERS

MATERIAL: FIBRE, per MIL-F-1148A, Grade CH.

These fibre bushings are ideal for use in raising sub panels, chassis, condensers, transformers, etc.

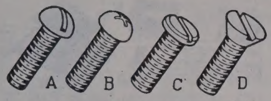


1/4" O.D.

Std. Pkg. 100

Length "L"	CLEARANCE HOLE #4(.115) No.	#6(.140) No.	#8(.171) No.	NET Per
.125	8880	8881	8882	$ 4.1
.187	8883	8884	8885	4.5
.250	2335	2130	2140	5.0
.312	8886	8887	8888	5.7
.375	2336	2131	2141	6.2
.437	8889	8890	8891	$ 6.7
.500	2337	2132	2142	7.3
.562	8892	8893	8894	8.1
.625	8895	8896	8897	8.4
.687	8898	8899	8900	9.3
.750	2338	2133	2143	$ 9.9
.812	8901	8902	8903	10.9
.875	8904	8905	8906	11.5
.937	8907	8908	8909	12.0
1.000	2339	2134	2144	12.3

GC ELECTRONIC HARDWARE



MACHINE SCREWS
ROUND HEAD STEEL NICKEL PLATED (A)

Screw Size & Lgth.	Cat. No.*	Net 100 -C*	Net 1000 -M*
2-26 x 1/2"	59-7131*	$0.63	$5.04
2-56 x 3/4"	59-7132*	.81	6.34
4-36 x 1/4"	59-6005*	.63	5.11
4-36 x 3/8"	59-7138*	.68	....
4-36 x 1/2"	59-6006*	.70	5.60
4-36 x 3/4"	59-6007*	.68	7.14
4-40 x 1/4"	59-6005-A*	.67	5.28
4-40 x 1/2"	59-6005-B*	.70	5.60
4-40 x 3/4"	59-6005-C*	.83	6.57
6-32 x 1/4"	59-6008*	.68	5.46
6-32 x 1/2"	59-6009*	.79	6.30
6-32 x 3/4"	59-6010*	.92	7.41
6-32 x 1"	59-6011*	1.07	8.54
6-32 x 1-1/4"	59-7141*	1.30	10.35
6-32 x 2"	59-7148*	1.93	15.39
8-32 x 1/4"	59-6013*	.91	7.28
8-32 x 3/8"	59-6014*	1.00	7.98
8-32 x 1/2"	59-6015*	1.07	8.54
8-32 x 3/4"	59-6016*	1.19	9.51
8-32 x 1"	59-6017*	1.37	10.92
10-32 x 1/2"	59-6020*	1.21	9.66
10-32 x 3/4"	59-6021*	1.46	11.61
10-32 x 1"	59-6022*	1.60	12.74
10-32 x 1-1/2"	59-7143*	2.12	16.94

ROUND HEAD BRASS NOT PLATED (A)

6-32 x 1/4"	59-8501*	$1.68	$11.06
6-32 x 3/8"	59-5670*	1.54	12.32
6-32 x 1/2"	59-8502*	1.68	13.43
6-32 x 3/4"	59-8503*	2.03	16.23
6-32 x 1"	59-8504*	2.42	19.31
6-32 x 1-1/4"	59-5672*	2.80	22.39
6-32 x 2"	59-5673*	4.73	....
8-32 x 1/4"	59-8505*	2.17	17.36
8-32 x 3/8"	59-5674*	2.15	17.21
8-32 x 1/2"	59-8506*	2.47	19.73
8-32 x 3/4"	59-8507*	....	24.21
8-32 x 1"	59-8508*	3.63	29.11
10-32 x 1/2"	59-5677*	3.12	24.91
10-32 x 3/4"	59-5679*	3.80	30.37
10-32 x 1"	59-5680*	4.54	.....
10-32 x 1-1/2"	59-5681*	6.38	.....

BINDING HEAD STEEL NICKEL PLATED (C)

4-40 x 1/4"	59-7170*	$0.68	$5.48
4-40 x 1/2"	59-7171*	.70	5.60
4-40 x 3/4"	59-7172*	.83	6.57
6-32 x 1/4"	59-7152*	.68	5.46
6-32 x 3/8"	59-7153*	.74	5.88
6-32 x 1/2"	59-7118*	.79	6.30
6-32 x 3/4"	59-7173*	.92	7.41
8-32 x 1/2"	59-7120*	1.07	8.54
8-32 x 3/4"	59-7175*	1.19	9.51
10-32 x 1/2"	59-7176*	1.21	9.66
10-32 x 3/4"	59-7177*	1.50	11.96

*Add suffix -C or -M to Cat. No.

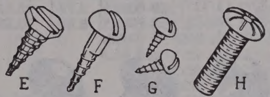
FOR A COMPLETE LISTING OF ALL OF G.C.'s INDUSTRIAL ELECTRONIC COMPONENTS, ASK FOR CATALOG FR-71-I

BINDING HEAD BRASS NICKEL PLATED (C)

Screw Size & Length	Cat. No.*	Net 100 -C*	Net 1000 -M*
6-32 x 3/4"	59-7173-1*	$2.03	$16.23
8-32 x 1/4"	59-7174-1*	2.15	17.18
8-32 x 3/8"	59-7119-1*	2.15	17.21
8-32 x 1/2"	59-7120-1*	2.47	19.73
8-32 x 3/4"	59-7175-1*	3.03	24.21
10-32 x 1/2"	59-7176-1*	3.39	27.15
10-32 x 3/4"	59-7177-1*	4.59	36.67

STEEL RACK SCREWS NICKEL PLATED (D)

6-32 x 1/2"	59-6540*	$0.79	$6.30
10-32 x 1/2"	59-8848*	1.21	9.66
10-32 x 3/4"	59-6543*	1.42	11.34



SELF—TAPPING STEEL NICKEL PLATED (E)

#4 x 1/2"	59-6090*	$1.07	$8.54
#6 x 1/4"	59-6091*	1.12	8.96
#6 x 1/2"	59-6093*	1.21	9.66
#6 x 3/4"	59-6094*	1.30	10.35
#8 x 1/4"	59-8102*	1.30	10.35
#8 x 1/2"	59-6096*	1.39	11.06
#8 x 1"	59-6097*	1.77	14.13
#10 x 1/2"	59-6099*	1.65	13.16
#10 x 3/4"	59-6100*	1.80	14.41

ESCUTCHEON SCREWS (G)

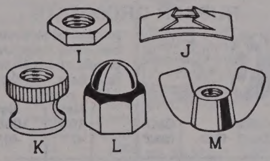
#2 x 1/4"‡	59-1091	....	$8.96

‡Bronze plated.

ORNAMENTAL HEAD (H)

6-32 x 1"‡	59-1098*	$1.79	$14.27

‡Steel, bronze plated.



NUTS
NICKEL PLATED STEEL (I)

Nut Thread & Size	Cat. No.*	Net 100 -C*	Net 1000 -M*
2-56 x 3/16"	59-7225*	$0.87	$6.99
4-36 x 1/4"	59-6041*	.87	6.99
4-40 x 1/4"	59-6041-A*	.87	6.99
6-32 x 1/4"	59-6042*	.87	6.99
6-32 x 5/16"	59-7230*	.95	7.56
8-32 x 1/4"	59-6043*	.87	6.99
8-32 x 5/16"	59-7232*	.95	7.56
10-32 x 3/8"	59-6049*	1.12	8.96
1/4-20 x 7/16"	59-7235*	1.55	12.45
1/4-32 x 3/8"	59-7715*	1,70	13.58
3/8-32 x 9/16"	59-6060-A*	1.87	14.97

*Add suffix -C or -M to Cat. No.

BRASS NUTS (I)

Nut Thread & Size	Cat. No.*	Net 100 -C*	Net 1000 -M*
4-40 x 1/4"	59-7244*	$1.50	$12.03
6-32 x 1/4"	59-7245*	1.49	11.90
8-32 x 5/16"	59-7248*	1.79	....
10-32 x 3/8"	59-7249*	1.96	....

SPEED NUTS (J)

#4 thread	59-6051*	$0.92	$7.41
#6 thread	59-6052*	1.00	7.98
#8 thread	59-6053*	1.00	7.98
#10 thread	59-8965*	1.12	....
#1/4 thread	59-8966*	....	12.19

BRASS THUMB NUTS (K) NICKEL PLATED

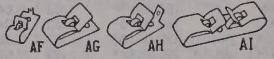
6-32 thread	59-6655*	$2.89	$23.89
8-32 thread	59-6656*	2.89	23.89
10-32 thread	59-6657*	6.33	....

ACORN NUTS (L)

6-32 thread	59-6031*	$3.52	$28.13
8-32 thread	59-6032*	3.73	29.81
10-32 thread	59-6033*	4.54	36.25

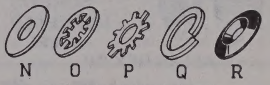
STEEL WING NUTS (M)

6-32 thread	59-6658*	$3.38	$27.01
8-32 thread	59-6659*	3.38	...
10-32 thread	59-6660*	3.38	...



FAHNESTOCK CLIPS

Cat. No.	See Fig.	Size L.	W.	Wire Ga.	Net 100
59-6301-C	AF	1/2"	7/32"	#16	$1.91
59-6302-C	AG	3/4"	5/16"	#14	2.18
59-6303-C	AG	1"	3/8"	#10	3,78
59-6304-C	AI	1-1/2"	5/16"	#10	14.00
59-6306-C	AH	3/4"	5/16"	#14	6.30



METAL WASHERS
FLAT STEEL (N) NICKEL PLATED

Screw Size	O.D.	Cat. No.*	Net 100 -C*	Net 1000 -M*
#4	9/32"	59-6154*	$0.58	$4.62
#6	3/8"	59-6155*	.58	4.62
#8	7/16"	59-6156*	.63	5.04
#10	3/8"	59-7306*	.60	4.76
#10	7/16"	59-7307*	.60	4.76
#10†	1/2"	59-6157*	.63	5.04

†Thickness .049", all others 1/32".

EXTERNAL LOCK WASHERS CADMIUM PLATED (P)

#4	....	59-7354*	$0.56	$4.47
#6	....	59-7356*	.56	4;47
#8	....	59-7358*	.61	4.89
#10	....	59-7360*	.61	4.89
1/4"	1/2"	59-7361*	.81	....

CUP WASHERS (R) NICKEL PLATED

#6	7/16"	59-6161*	$0.60	$4.76
#8	1/2"	59-6162*	.63	5.04
#10	9/16"	59-6163*	.71	5.73

*Add suffix -C or -M to Cat. No.

Cont'd on next page.

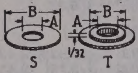
GC ELECTRONICS HARDWARE

METAL WASHERS
INTERNAL LOCK WASHERS
CADMIUM STEEL (O)

Screw Size	O.D.	Cat. No.*	Net 100 -C*	Net 1000 -M*
#4	....	59-7324*	$0.58	$4.62
#6	9/32"	59-7326*	.56	4.47
#8	21/64"	59-7328*	.61	4.89
#10	....	59-7330*	.61	4.89
1/4"	15/32"	59-7332*	.81	6.44
5/16"	19/32"	59-7333*	1.03	8.51
3/8"	11/16"	59-7334*	1.21	9.66

SPLIT LOCK WASHERS
CADMIUM STEEL (Q)

#4	3/16"	59-6503*	$0.74	$5.88
#6	15/64"	59-6504*	.60	4.76
#8	11/32"	59-6505*	.97	9.01
#10	5/16"	59-6506*	.68	5.46
1/4"	7/16"	59-6507*	1.02	8.12

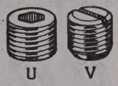


FIBRE WASHERS
FLAT WASHERS (S)

Dim. "A"	Dim. "B"	Cat. No.*	Net 100 -C*	Net 1000 -M*
#6	1/4"	59-6513*	$0.63	$5.04
#8	3/8"	59-6514*	.63	5.04
#10	3/8"	59-6515*	.63	5.04
1/4"	1/2"	59-6516*	.68	5.46
3/8"	39/64"	59-6517*	.99	7.83

SHOULDER WASHERS (T)

#6	3/16"	59-6525*	$1.12	$8.96
#8	1/4"	59-6526*	1.12	8.96
#10	1/4"	59-6527*	1.21	9.66
1/4"	3/8"	59-6528*	1.21	9.66
3/8"	7/16"	59-6529*	1.26	10.08

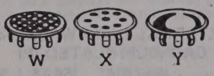


SET SCREWS HARDENED STEEL
ALLEN HEX (U)

Screw Size	Cat. No.*	Net 100 -C*	Net 1000 -M*
6-32 x 1/8"	59-7196*	$6.27	$50.10
6-32 x 3/16"	59-7197*	6.27	50.10
8-32 x 1/8"	59-7201*	6.27	50.10
8-32 x 3/16"	59-7202*	6.27	50.10

SLOTTED (V)

6-32 x 3/16"	59-6072*	....	$18.33
8-32 x 3/16"	59-6075*	$2.29	....
8-32 x 1/4"	59-6076*	2.29	....
10-32 x 1/4"	59-6079*	2.29	....



HOLE PLUGS

Snap-in, nickel plated steel plugs for covering recessed adjustments, filling open holes, or ventilating equipment.

1" VENTILATING

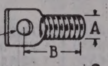
Plug Type	Cat. No.*	Net 100 -C*	Net 1000 -M*
Screen (W)	59-1708*	$27.15	$217.19
Holed (X)	59-1709*	10.30	82.43

*Add suffix -C or -M to Cat. No.

Continued in next column.

HOLE PLUGS
SNAP-IN (Y)

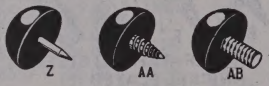
Hole Size	Cat. No.*	Net 100 -C*	Net 1000 -M*
1/4"	59-1711-A*	$2.84	$22.67
5/16"	59-17-11-B*	3.05	24.35
3/8"	59-1711*	3.22	25.75
1/2"	59-1712*	3.91	31.21
5/8"	59-1713*	4.20	33.59
3/4"	59-1714*	4.23	33.86
7/8"	59-1714-A*	5.88	47.02
1"	59-1715-A*	5.63	45.07
1-1/8"	59-1715-B*	7.52	60.18
1-1/4"	59-1715*	8.20	65.64
1-3/8"	59-5700*	9.04	....
1-1/2"	59-5702*	11.92	95.30



SPADE BOLTS

Screw Size	Cat. No.*	Net 100 -C*	Net 1000 -M*
6-32 x 11/32"†	59-6081*	$3.62	$28.97
6-32 x 13/32"†	59-6082*	3.77	30.12
8-32 x 7/16"‡	59-6084*	8.80	70.36

†C for #6, ‡ for #8 screw.



RUBBER BUMPERS
TACK TYPE (Z)

Dia. Base.	Ht.	Cat. No.*	Net 100 -C*	Net 1000 -M*
3/8"	3/16"	59-1075*	$2.36	$18.89

WOOD SCREW TYPE (AA)

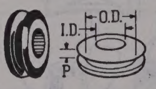
3/8"	3/16"	59-1075-B*	1.68	13.43
1/2"	1/4"	59-1075-C*	2.23	17.78
5/8"	5/16"	59-1075-F*	3.13	25.05

MACHINE SCREW TYPE (AB)

1/2"†	1/4"	59-5764*	4.07	32.52
5/8"†	5/16"	59-5765*	5.06	40.38
3/4"†	3/8"	59-5766*	6.33	50.65
7/8"‡	1/2"	59-5767*	7.12	56.91
1"‡	1/2"	59-5768*	7.55	60.38

† #8-32 screw, ‡ #10-32 screw.

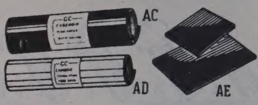
RUBBER GROMMETS



Molded of soft rubber. For use on panels of 1/16" in thickness. ‡ for 1/8" panels.

Size I.D.	Size O.D.	Cat. No.*	Net 100 -C*	Net 1000 -M*
1/8"	3/16"	59-1041-2*	$1.42	$11.34
3/16"	5/16"	59-1041*	1.62	12.87
1/4"	3/8"‡	59-7566*	3.12	24.91
1/4"	3/8"	59-1042*	2.12	16.94
3/8"	1/2"	59-1043*	2.42	19.31
7/16"	9/16"	59-5712*	6.54	52.34
1/2"	5/8"	59-1043-1*	3.65	29.25
9/16"	3/4"	59-5711*	4.48	35.83
3/8"	13/16"	59-7569*	7.31	58.50
5/8"	7/8"	59-5716*	7.28	58.22
11/16"	1"	59-5717*	14.66	117.27
1-1/2"	1-3/4"	59-5724*	21.90	175.20

*Add suffix -C or -M to indicate quantity.



INSULATION
.010" "FISH PAPER" (AC)

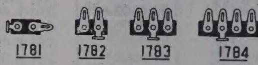
Cat. 59-560 144 Sq. in. **Net $0.7**

.01." VARNISHED CAMBRIC (AD

Cat. 59-549 210 sq. in. **Net. $0.**
Cat. 59-548 Per sq. yd. **Net. $3.**

PHENOLIC PANELS (AE)

Cat. 59-591 6" x 12" x 1/16" **Net $0.**
Cat. 59-592 12" x 12" x 1/16" **Net $1.**



TERMINAL STRIPS

Cat. No.	Ins. Ter.	Gnd. Ter.	Net 10*	10
59-1781-*	1	0	$0.40	$3
59-1782-*	1	1	.40	3
59-1783-*	2	1	.45	3
59-1784-*	3	1	.60	4
59-1785-*	4	1	.70	5
59-1786-*	5	1	.80	6
59-1787-*	6	1	1.25	11
59-1788-*	6	2	1.40	12

*Add suffix 10 or C to indicate quantit

ASSORT-MENTS

In plastic boxes v
hinged lids and
divisions.

MACHINE SCREWS

Contains 100 #4-40 x ½", 100 #6-32
¼", 50 #6-32 x ¾", 50 #8-32 x
rd. hd. screws, 75 #6 x ½" sheet me
screws and 100 each of #4-40, h
nuts #6-32 and #8-32 x ¼".
Cat. 59-9199 Each **Net $4.**

SHEET METAL SCREWS

Contains 700 screws in popular si
and lengths of #4, #6 and #8 h
head, slotted screws.
Cat. 59-9193 Each **Net $6.**

SOLDER LUGS

Lugs are made of hot-tinned .020" a
.032" brass or copper, Contains 325 l
for use with #6, #8 and #10 mach
screws.
Cat. 59-9187 Each **Net $4.**

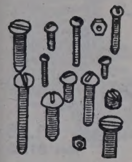
HELL BOX

Contains an assortment of all types
screws, nuts, solder lugs, clips, wash
caps, grommets, brackets, spacers
other pieces of hardware which are nee
for every day service and sometimes
to find. In a sturdy metal box.
Cat. 59-6500 Hell Box **Net $2**

WALDOM

WALDOM NYLON HARDWARE AND STRAPPING

NYLON SCREWS, NUTS & WASHERS



Molded to American Standard Thread Specifications, Class 2 Threads. Self-insulating and non-magnetic, they provide good torque strength, form stability at high temperatures, and abrasion resistance. Round, binder, fillister and flat head screws, and appropriate hex nuts and washers are available. Available from stock in natural color; color coding on special order.

ROUND HEAD

Cat. No.	Thd.	Lgth.	Net 100
40-FN-800	2-56	¼	$3.65
40-FN-801	2-56	½	3.65
40-FN-802	4-40	¼	3.65
40-FN-803	4-40	½	3.65
40-FN-804	4-40	¾	3.75
40-FN-805	6-32	¼	3.65
40-FN-806	6-32	3/8	3.75
40-FN-807	6-32	½	3.75
40-FN-808	6-32	5/8	3.75
40-FN-809	6-32	¾	3.85
40-FN-810	8-32	3/8	3.85
40-FN-811	8-32	½	3.85
40-FN-812	8-32	¾	3.84
40-FN-813	10-32	½	4.00
40-FN-814	10-32	1	4.30

FILLISTER HEAD

Cat. No.	Thd.	Lgth.	Net 100
40-FN-830	2-56	¼	$3.65
40-FN-831	2-56	½	3.65
40-FN-832	4-40	¼	3.65
40-FN-833	4-40	½	3.65
40-FN-834	4-40	¾	3.75
40-FN-835	6-32	¼	3.65
40-FN-836	6-32	3/8	3.75
40-FN-837	6-32	½	3.75
40-FN-838	6-32	5/8	3.75
40-FN-839	6-32	¾	3.85
40-FN-840	8-32	3/8	3.85
40-FN-841	8-32	½	3.85
40-FN-842	8-32	¾	3.85
40-FN-843	10-32	½	4.00
40-FN-844	10-32	1	4.30

BINDER HEAD

40-FN-815	2-56	¼	$3.65
40-FN-816	2-56	½	3.65
40-FN-817	4-40	¼	3.65
40-FN-818	4-40	½	3.65
40-FN-819	4-40	¾	3.75
40-FN-820	6-32	¼	3.65
40-FN-821	6-32	3/8	3.75
40-FN-822	6-32	½	3.75
40-FN-823	6-32	5/8	3.75
40-FN-824	6-32	¾	3.85
40-FN-825	8-32	3/8	3.85
40-FN-826	8-32	½	3.85
40-FN-827	8-32	¾	3.85
40-FN-828	10-32	½	4.00
40-FN-829	10-32	1	4.30

FLAT HEAD

40-FN-845	4-40	½	$3.65
40-FN-846	6-32	3/8	3.75
40-FN-847	6-32	½	3.75
40-FN-848	6-32	5/8	3.75
40-FN-849	8-32	½	3.85
40-FN-850	8-32	¾	3.85
40-FN-851	10-32	½	4.00
40-FN-852	10-32	1	4.30

NYLON NUTS

40-FN-853	2-56x3/16	5.85
40-FN-854	4-40x¼	5.95
40-FN-855	6-32x5/16	6.05
40-FN-856	8-32x11/32	6.15
40-FN-857	10-32x3/8	6.20

FLAT WASHERS

Stamped from extruded nylon strip. Use as insulating or cushioning washers, spacers, thrust washers. *Thickness.

Cat. No.	ID	OD	*	Net 100
40-NW-875	#4	9/32	.050	$.65
40-NW-876	#6	5/16	.050	.75
40-NW-877	#8	3/8	.060	1.00
40-NW-878	#10	7/16	.060	1.10

FINISHING WASHERS

Made for ¼” countersunk metal or nylon screws. Prevents cutting and scratching. Can be used as glides, protective feet, bumpers, insulators, spacers. *Thickness.

Cat. No.	ID	OD	*	Net 100
40-NW-879	#6	.437	.100	$4.45
40-NW-890	#8	.515	.115	4.70
40-NW-891	#10	.580	.152	5.00

NYLON & BUTYRATE CABLE CLAMPS

These non-magnetic cable clamps withstand heat, abrasion, and most chemicals, and eliminate the need for separate insulation. Nylon types give excellent service under severe conditions at low cost. Butyrate types are especially appropriate for outdoor use. †3/8” width. All others ½”. 3/8” widths have .167 mtg. hole; all others have 13/64”. 3/8” widths are .040 thick; all others are .060 thick.

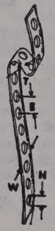
NYLON CLAMPS

Cat.	Quantity	Net	I.D.
40-CCN-31†	100/pkg.	$3.14	1/8”
40-CCN-33†	100/pkg.	3.63	1/4”
40-CCN-35†	50/pkg.	2.23	3/8”
40-CCN-37	25/pkg.	1.50	1/2”
40-CCN-39	25/pkg.	1.98	5/8”
40-CCN-41	20/pkg.	1.90	3/4”
40-CCN-43	15/pkg.	1.79	1”
....			1-1/8”
....			1-1/4”

BUTYRATE CLAMPS

Cat.	Quantity	Net
40-CCB-1	100/pkg.	$2.20
40-CCB-3	100/pkg.	2.45
40-CCB-5	50/pkg.	1.50
40-CCB-7	40/pkg.	1.45
40-CCB-9	25/pkg.	1.40
40-CCB-11	20/pkg.	1.40
40-CCB-13	15/pkg.	1.30
40-CCB-14	15/pkg.	1.30
40-CCB-15	10/pkg.	1.50

PERFORATED NYLON STRAPPING

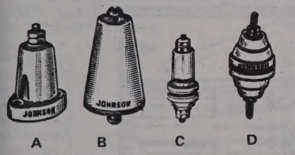


Ideal for bundling, mounting, clamping, or hanging of wires, cables, conduit, rods, tubing, and pipe. Strong enough for permanent use and practical for temporary arrangements. Made for service below 300°F., temperatures may go as low as -60°F. Available in black or natural . . . please specify.

Cat. No.	W	T	H	E	Break Load	Net 25′	Net 50′
40-NS-932	9/32	.032	.096	3/16	23 lbs.	$5.90	$10.60
40-NS-38	3/8	.040	.167	5/16	51 lbs.	6.45	12.90
40-NS-12	1/2	.060	.203	25/64	107 lbs.	8.30	14.70

40-SB-4	Stud button for use with NS-932	Net 100	$1.95
40-SB-5	Stud button for use with NS-38	Net 100	4.30
40-SB-6	Stud button for use with NS-12	Net 100	4.45

JOHNSON INSULATORS



Dense molding and glazing make these insulators resistant to fracture and breakage. Extremely low moisture absorption. Long leakage paths.

STEATITE STANDOFFS. FIG. A.

Cat. No.	O’All Ht.	Mtg. Ctrs.	Top Dia.	Hardware	Net Each
71-135-0020-001	1-9/16”	1-5/16”	3/4”	10-32	$0.50
71-135-0022-001	1”	13/16”	15/32”	8-32	.35
71-135-0024-001	5/8”	11/16”	3/8”	6-32	.22

CONE INSULATORS. FIG. B.

71-135-0500-001	21/32”	5/8”	7/16”	6-32	$0.32
71-135-0501-001	1-1/32”	3/4”	1/2”	8-32	.40
71-135-0502-001	1-9/16”	1”	1/2”	8-32	.70
71-135-0503-001	2-1/16”	1-1/8”	5/8”	10-32	1.10
71-135-0504-001	3-1/16”	1-1/2”	3/4”	10-32	4.15

THRU-PANEL. FIG. C.

Cat. No.	Ht. Above	Base Dia.	Depth Below	Hardware	Net Each
71-135-0040-001	1-1/4”	15/16”	1/2”	10-32	$0.75
71-135-0042-001	7/8”	3/4”	3/8”	10-32	.70
71-135-0044-001	5/8”	5/8”	5/16”	6-32	.45

THRU-PANEL. FIG. D.

71-135-0050-001	1/2”	3/4”	15/32”	6-32	$0.55
71-135-0051-001	13/16”	1-1/4”	27/32”	10-32	.90
71-135-0052-001	1-1/8”	1-3/4”	1-7/32”	1/4-20	1.25
71-135-0055-001	1/4”	3/4”	15/32”	6-32	.40

NEW ADHESIVE MOUNTED LOCKING CABLE CLIP

FOR 3/16" to 3/4" CABLE

This unique cable clip offers the user an easily mounted, neat appearing fastening device which requires no mounting hardware yet has extremely high holding power. The exclusive patented lock/release design allows easy insertion of cable and a positive holding action once it is locked in place. The long aging adhesive backing on the clip holds to almost any clean surface and has an average pull-off strength depending on the size of the clip of 12 pounds. Made of high impact, stable PVC with a temperature range of -20 to +180°F.

Cat. No.	Cable Dia.	Net 100
59-34-372-C	3/4”	$30.49
59-34-376-C	5/8”	21.19
59-34-380-C	1/2”	16.38
59-34-383-C	3/8”	14.21
59-34-387-C	1/4”	12.20

Cat. No.	Cable Dia.	Net 100
59-34-393-C	3/16”	$11.18
59-34-396-C	3/8”	10.00
59-34-400-C	1/4”	8.46
59-34-404C	3/16”	7.70
....		

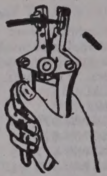
ETHOCEL PLASTIC CABLE CLAMPS

Ethocel combines light weight and chemical resistance with excellent shock resisting properties in a temperature range from -40°F. to +185°F. Their toughness and excellent electrical properties satisfy unlimited fastening problems throughout the electronic and electrical industries. Approved 7-21-44 to Army-Navy Aeronautical Specifications AN-742.

Cat.	Cable	Net 100
59-34-304C	¼” O.D.	$2.40
59-34-316C	3/8” O.D.	3.00
59-34-324C	½” O.D.	3.60
59-34-344C	¾” O.D.	5.10
59-34-352C	1” O.D.	5.70

G-C ELECTRONICS

"SPEEDEX" WIRE STRIPPERS



Fast operating, precision made hand tools for removing insulation from almost every type of wire. Used in every major industry and by the Armed Forces. Hardened steel blades are replaceable. Most popular types are listed below. Others are available for special applications.

STANDARD 733

Economy model which will take care of 90% of stripping jobs. Does not have "stay open" feature.

Cat.	For AWG
59-733	12 to 20
59-733-A	14 to 30
59-733-B	10 to 18
59-733-C	8 to 10

Models Above Each, **Net** **$5.98**

TRIG-O-MATIC 744

With "stay-open" feature for stripping fine stranded or solid wires. Jaws remain open until wire is removed. Has "on-off" lock for "stay-open" feature.

Cat.	For AWG
59-744	12 to 20
59-744-A	14 to 30
59-744-B	10 to 18
59-744-C	8 to 10

Models Above Each, **Net** **$7.53**

SPEED-O-MATIC 766

Fully automatic with delayed return action to prevent crushing of fine wires.

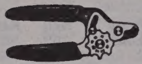
Cat.	For AWG
59-766	10 to 20
59-766-A	14 to 30
59-766-B	10 to 18
59-766-C	8 to 10

Models Above Each, **Net** **$7.53**

STRIPPER KITS

Contain one Wire Stripper and seven different blade sizes put up in a special steel box. Strips wire sizes from 8 to 30 AWG.

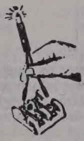
Cat.	Net
59-744-K	14.70
59-766-K	14.70



STRIP-ER-CLIP
KWIK-FLIP 7-STOP GAUGE

Instant, easy thumb adjustment for wire sizes from 14 to 26 AWG. Does not nick conductors. Made of heat-treated tool steel with specially ground cutting edges. Comfortable cushion grips.

Cat. 59-760 Wire Stripper **Net** **$1.49**

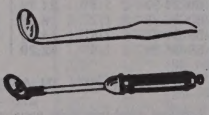


NE-O-LITE TEST LIGHT

A simple, safe dependable electrical circuit tester; easy to use with a neon glow lamp which varies in light intensity according to voltage. Traces all types of trouble, such as grounded lines, open circuits, etc. 5" insulated leads with phone tips. Instantly tests by glow both AC & DC circuits. 60 volts AC to 550 volts AC or DC. For testing radios, TV's, armatures, polarity, automotive spark plugs, electrical fences, cords, appliances, signals, locates blown fuses, cables and circuits.

Cat. 59-5100 Ne-O-Lite Test Light **Net $0.60**

G-C INSPECTION MIRRORS



For use in viewing components in inaccessible parts of TV or radio chassis.

ALL PLASTIC (TOP)

Eliminates danger of shorting if used while chassis is "hot". Completely shock-proof.

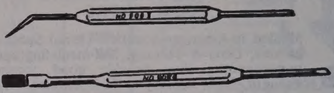
Cat. 59-5090-P Each **Net** **$.45**

ILLUMINATED

With pen-light in handle. 6" translucent lucite rod conducts light to hinged mirror. Less 2 penlite batteries.

Cat. 59-8725 With 7/8" mirror **Net $2.50**

G-C SOLDERING TOOLS



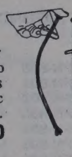
Stainle
steel. Sold
does not a
here. 90
is for s
dering.

9094 is for use with printed circuits.

Cat. 59-9093 Split & probe tips **Net** **$1.**

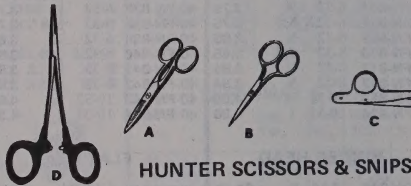
Cat. 59-9094 Scraper & Brush ends **Net $1.**

HANDY PICK-UP TOOL
"MECHANICAL FINGERS"



One of the handiest tools for the shop, office or home. Will pick up pieces and parts dropped into inaccessible places, will hold screws, nut and bolts to start. Very handy for the electrician, electronic engineer or auto mechanic. Tool is 24 inches long.

Cat. 59-5089 Pick-up Tool **Net Ea.** **$1.50**



HUNTER SCISSORS & SNIPS

Scissors (Fig. A&B) have straight blade. For use as an electr shear. Forged steel, nickel plated. Sturdy built for cutting l wire. Fig. C is a straight blade nipper of forged steel, chr plated. Designed to be held in palm of hand and keep fingers for use. Fig. D is straight end scissor clamp. Stainless steel, pered blades, precision box joint, fine serrated jaws. Lock o easily. For solder clamping.

Cat.	Fig.	Description	Size	
371-F15	A	Electronic Scissor (Medium)	3½"	$
371-F12	B	Electronic Scissor (Small)	5"	
371-F14	C	Nippers (Straight blade)	4½"	
371-X-F35	D	Scissor-Clamp (Straight end)	5"	
371-X-F36	D	Scissor-Clamp (Curved end)	5"	

E20

E65A KIT

HUNTER KNIVES

Beautifully nade knives with replaceable blades designed to multitude of cutting jobs. Used in many industries such a electronic field, the graphic arts field and the textile indus

E20-Utility knife,. General use, all purpose knife. A light w but sturdy knife that will give good service in lighter kin industrial service. Made of light weight aluminum. Knife is 5 in diameter and 5" long.

E65A-Set with 10 assorted blades and three knives. Nos. E20, and E40.

Cat.	Description	
371-E20	Utility knife for general use.	$
371-E65A	Set with 10 assorted blades & three knives.	

SOLDER & SOLDERING FLUX

ERSIN MULTICORE SOLDER

Has five flux cores for faster, better soldering with less heat. Exclusive Ersin flux is non-corrosive, non-conductive and makes solder adhere quickly and permanently. Meets Government specs QQ5-571d. Alloy is tin-lead percentage. For 7-pound reels deduct 4c per pound from prices below and change last figure in Cat. No. (1) to 7, i.e., 95-45-16-7. *Available in 1 lb. carton only.

Cat. No.	Gauge	Alloy	Quantity	Net
95-46-16-1	16	40/60	1 lb. carton	$2.99
95-55-16-1	16	50/50	1 lb. carton	3.37
95-55-18-1	18	50/50	1 lb. carton	3.70
95-64-14-1	14	60/40	1 lb. carton	3.72
95-64-16-1	16	60/40	1 lb. carton	3.74
95-64-18-1	18	60/40	1 lb. carton	3.81
95-64-20-1*	20	60/40	1 lb. carton*	4.11
95-64-21-1*	21	60/40	1 lb. carton*	4.24
95-64-22-1*	22	60/40	1 lb. carton*	4.42
95-64-24-1*	24	60/40	1 lb. carton*	6.32

LOW MELTING POINT SOLDER

Melting point, 354°F., recommended bit temperature, 462°F. Usage: soldering ceramics, printed or etched circuits, and silver-coated surfaces. Available in 1 lb. carton only.

Cat. No.	Gauge	Alloy	Quantity	Net
95-LMP-16-1	16	62/36/Silver	1 lb. carton	$5.67
95-LMP-18-1	18	62/36/Silver	1 lb. carton	6.56
95-LMP-22-1	22	62/36/Silver	1 lb. carton	8.12

EUTECTIC—361°F.

95-EUT-16-1	16	63/37	1 lb. carton only	$3.96
95-EUT-18-1	18	63/37	1 lb. carton only	4.03
95-EUT-20-1	20	63/37	1 lb. carton only	4.19
95-EUT-22-1	22	63/37	1 lb. carton only	4.36

HIGH MELTING POINT SOLDER

Melting point 565°F., recommended bit temperature, 673°F. Usage: soldering transformers, capacitors, relays, etc. Composition: Silver-tin-lead. Melting Range: 296°C. Tensile Strength: 2.5 tons/sq. in. Elongation: 40%. Electrical Conductivity 8.0% IACS. Particularly suitable for use on radio and electrical equipment which may be subject to sub-zero temperatures down possible to -190°C. Available in 1 lb. carton only.

Cat. No.	Gauge	Alloy	Quantity	Net
95-HMP-16-1	16	5/93/Silver	1 lb. carton only	$4.78
95-HMP-18-1	18	5/93/Silver	1 lb. carton only	4.85

ERSIN MULTICORE "SAVBIT" ALLOY

REDUCES WEAR ON COPPER TIPS

Ordinary tin/lead alloy solders absorb copper from the soldering iron tip, causing rapid wear. Copper-loaded SAVBIT alloy does not absorb copper, thus reduces wear, prolongs tip life by as much as 90%. Contains five cores of non-corrosive, extra-active Ersin flux for faster soldering.

Cat. No.	Gauge	Quantity	Net
95-SB#14-1	14	1 lb. carton	$3.58
95-SB#14-7	14	7 lb. spool	24.78
95-SB#16-1	16	1 lb. carton	3.61
95-SB#16-7	16	7 lb. spool	24.99
95-SB#18-1	18	1 lb. carton	3.74
95-SB#18-7	18	7 lb. spool	25.90
95-SB#20-1	20	1 lb. carton only	4.07
95-SB#22-1	22	1 lb. carton only	4.37

FIVE CORE EXTRA FINE GAUGES

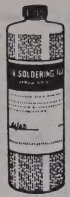
5 core solder so small it goes through the eye of a needle. Ideal for microminiaturization, hearing aids, integrated circuit usage, and other electronic applications requiring fine gauges. Particular attention must be given to the soldering iron bit size and temperature to avoid charring. Available in ½ lb. spools only.

Cat. No.	Gauge	Alloy	Net
95-EF-24-½	24	60/40	$2.96
95-EF-28-½	28	60/40	3.90
95-EF-32-½	32	60/40	5.09
95-EF-34-½	34	60/40	6.18
95-EFE-22-½ (Eutectic)	22	63/37	2.26
95-EFE-24-½ (Eutectic)	24	63/37	3.09
95-EFE-28-½ (Eutectic)	28	63/37	3.96
95-EFE-32-½ (Eutectic)	32	63/37	5.14

EASY DISPENSER PAKS

Regular type has 18 gauge, 5-core solder 60% tin, 40% lead, for general soldering. P.C. type is for printed circuit use and is 22 gauge 60/40 solder.

Cat. 95-Regular Dispenser Pak	Each	Net $.59
Cat. 95-P.C. Printed Circuit Pak	Each	Net $ .59



NEW LIQUID SOLDER FLUX

ACTIVE & NON-ACTIVATED

Liquid soldering flux may be used for any soldering application requiring a non-corrosive and non-conducting flux residue. May be applied by brush, spray, dip, or soldering machines. Will not only remove surface oxides, but prevents their formation during soldering and acts as a heat transfer medium between heat source, joint members and solder. A non-tacky, non-corrosive insulating residue is left on soldered joint. Formulas 5380 & 0360 meet MIL specs for active and non-activated liquid fluxes. No. 4370 is the external counter part of the flux contained Ersin 5-Core Solder, and conforms to Federal Spec QQ-S-571d. The concentration can be maintained by using PC70 Thinner.

Cat.		Pt.	Qt.	Gal.
95-5380	Activated Flux	$2.50	$3.40	$7.95
95-0360	Non-Activated Flux	2.50	3.40	7.95
95-4370	Activated Flux	2.50	3.40	7.95
95-PC70	Thinner	2.25	3.06	7.15

BAR SOLDER

New Multicore Bar solder is extruded, a process that results in higher purity and greater quality control. Less oxide . . . better soldering. Available in 1 lb. bars, 2 lb. packages or 14 lb. cartons.

Cat. 95-B-55	50/50 Alloy Bar Solder	Net $2.71/lb.
Cat. 95-B-64	60/40 Alloy Bar Solder	Net $3.19/lb.
Cat. 95-B-63	63/37 Alloy Bar Solder	Net $3.25/lb.

KESTER

KESTER "44"

RESIN CORE SOLDER

This new Resin Core Solder was designed for electronic and electrical work. It replaces and outperforms the old "Resin Five" and Plastic Rosen Core Solders. Features an amazing, fast-acting, instant wetting non-corrosive and non-conductive flux that makes soldering faster than ever before and provides a permanent stronger, longer-lasting bond. *Tin-Lead percentage.

1 LB. SPOOL				5 LB. SPOOL	
Cat.	Ea.	Alloy*	Dia.	Cat.	Ea.
93-24-4060-0061	$2.79	40/60	.062	93-26-4060-0061	$13.70
93-24-4060-0066	2.68	40/60	.093	93-26-4060-0066	13.20
93-24-5050-0061	3.31	50/50	.062	93-26-5050-0061	16.25
93-24-5050-0066	3.17	50/50	.093	93-26-5050-0066	15.60
93-24-6040-0018	5.32	60/40	.025	93-26-6040-0018	.....
93-24-6040-0027	4.54	60/40	.031	93-26-6040-0027	20.80
93-24-6040-0039	4.37	60/40	.040	93-26-6040-0039	19.95
93-24-6040-0053	4.16	60/40	.050	93-26-6040-0053	19.40
93-24-6040-0061	3.72	60/40	.062	93-26-6040-0061	18.35
93-24-6040-0066	3.61	60/40	.093	93-26-6040-0066	17.75

SOLID WIRE SOLDER

93-14-4060-0125	$2.57	40/60	.125	93-16-4060-0125	$12.45
93-14-5050-0125	2.96	50/50	.125	93-16-5050-0125	14.45
93-14-6040-0125	3.48	60/40	.125	93-16-6040-0125	17.00

ACID CORE SOLDER

For easy soldering where corrosive flux does not matter. Supplied only in 40% tin/60% lead alloy.

Cat. 93-24-4060-2437	1 lb. spool	Net $1.89
Cat. 93-26-4060-2437	5 lb. spool	Net $9.25

TINNING BLOCKS

Replaces ordinary sal-ammoniac. Cleans and "tins" soldering irons or coppers speedily.

Cat. 93-51-0000-0005	½ lb. size	Net $.76
Cat. 93-52-0000-0006	1 lb. size	Net $1.14

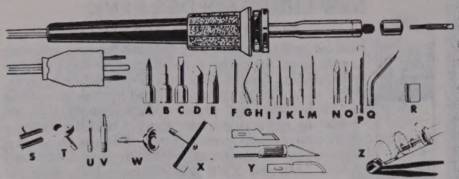
SOLDERING PASTE

Cat. 93-84-0000-0005	2 Ounce Can	Net $.27
Cat. 93-84-0000-1001	1 Pound Can	Net $1.42

ROSIN RESIDUE REMOVER

Cat. 93-63-0000-5235	1 Gallon	Net $11.31

SOLDERING EQUIPMENT



NEW UNGAR 3-WIRE SOLDERING IRON
WITH MULTI-TIP INTERCHANGEABILITY

This integrated iron has a molded phenolic handle and a roll-proof pastel color octagonal grip. The iron also features cooler handle-to-tip-temperature ratio, lightweight and other typical Ungar fatigue-free features. Ideal for use as a production soldering tool with approved grounding. It will accept more than 40 -3/16" and 1/8" thread-in and 1/4" thread-on tips, tiplets, nibs and de-soldering tips. Available in 3 wattages listed below. Designed to eliminate static induced currents, this feature makes the iron especially desirable for work on MOSFET and other IC components. Meets military, NASA and other government contractor soldering standards. The threaded metal body for tip interchangeability is fabricated from a special metal alloy that makes the tips and tiplets seizure resistant.

Cat. No.	Watts	Tip Temp.	Bushing	Volts	Net 1-9	10-99	100-Up
67-127	27	650°F-750°F	Beige	120	$6.66	$5.47	$5.00
67-135	35	750°F-850°F	Green	120	6.66	5.47	5.00
67-145	45	900°F-1000°F	Blue	120	6.66	5.47	5.00

*A 1/8" and 3/16" adapter included with each iron.

¼" STANDARD THREAD-ON TIPS

Fit directly on the metal body without the need for an adaptor. Numbers with PL prefix are tellurium copper, iron-clad, silver-plated. Numbers with no prefix are unplated tellurium copper.

Cat. No.	See Fig.	Tip Description	Net 1-9	10-99	100-Up
67-PL-111	A	Pencil, ¾"L. x 1/8"D.	$1.00	$0.82	$0.75
67-111	A	Same as above	.48	.40	.36
67-PL-113	C	Chisel, ¾"L. x 1/8"D.	1.00	.82	.75
67-113	C	Same as above	.48	.40	.36
67-PL-114	B	Micro-spade 1/8"L to .056"D.	1.00	.82	.75
67-PL-116	D	Pyramid, ¾"L. x 5/16"D.	1.00	.82	.75
67-116	D	Same as above	.48	.40	.36
67-PL-133	E	Chisel tip long taper, ¾"L. x 5/16"D.	1.00	.82	.75

1/8" STANDARD THREAD-ON TIPS

The supplied adapter is threaded on first then the tiplet is threaded into the adapter. †Iron clad, silver plated.

67-PL-331	F	1" pencil, 1/8"D.	$0.76	$0.63	$0.57
67-331	F	Same as above	.31	.26	.23
67-PL-332	G	1" offset pencil, 1/8"D.	.76	.73	.57
67-332	G	Same as above	.31	.26	.23
67-PL-333	H	1" long chisel, 1/8"D.	.76	.63	.57
67-333	H	Same as above	.31	.26	.23
67-7155†	I	Chisel, 1/8..D. to 0.68"D.	.76	.63	.57
67-PL-338	J	Tapered needle, 1/8"D.	.76	.63	.57
67-PL-340	K	½" Micro-spade .054"D.	.76	.63	.57
67-7062†	L	Precision point, 1/8"D.	1.41	1.14	1.06
67-7154†	M	Pencil, 1/8"D to .068"D.	.76	.63	.57

3/16" STANDARD THREAD-IN TIPS

Used with 3/16" adapter.

67-PL-823	N	1" pyramid, 3/16"D.	$0.88	$0.72	$0.66
67-823	N	Same as above	.36	.30	.27
67-PL-824	O	1" chisel, 3/16"D.	.88	.72	.66
67-824	O	Same as above	.36	.30	.27
67-PL-833	P	1¾" chisel, 3/16"D.	1.18	.97	.88
67-PL-834	Q	1¾" offset chisel, 3/16"D.	1.18	.97	.88

DE-SOLDERING TIPS FOR MODEL 145 IRON

*Use with 1/8" adapter. **Use with 3/16" adapter.

67-6948*	S	For up to 16-pin IC's	$2.90	$2.50	$2.25
67-6943*	S	For 8,10,or 12-lead IC's	2.50	2.15	1.95
67-6944*	T	For TO Pkgs. .500"Dia.	2.50	2.15	1.95
67-6945*	T	For transistor pads, .375"dia.	2.50	2.15	1.95
67-6946*	T	For TO-5 pkgs., .280" dia.	2.50	2.15	1.95
67-6947*	U	Slotted lead straightener	2.10	1.80	1.60
67-857**	V	1/16 Slotted tip, 1x3/16"D.	1.05	.86	.78
67-854**	W	1" cup tip	1.05	.86	.78
67-855**	W	¾" cup tip	1.05	.86	.78
67-856**	W	5/8" cup tip	1.05	.86	.78
67-858**	X	Bar tip, 1½" x 3/8"	1.05	.86	.78
67-100	R	1/8" Replacement adapter	.26	.20	.18
67-101	R	3/16" Replacement adapter	.26	.20	.18

7910 HOT KNIFE ATTACHMENT (Fig. Y)

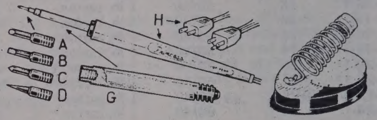
Cuts and seals synthetics, vinyl film, other plastics. Cuts ep
coatings on P.C. Boards. This knife set is recommended for th
watt, 35 watt, and 45 watt irons, depending upon the material
which you are working. The set consists of a collet blade att
ment holder and 3 knife blades. The collet holder accepts
tang style blades.

Cat. 67-7910 Hot Knife Attachment **Net $1**

6800 SAFETY GUARD IRON HOLDER

Protects operator from burns; prevents iron breakage. Feature
justable angle; attaches easily to workbench. The 3-wire iron
this holder only. See Fig Z.

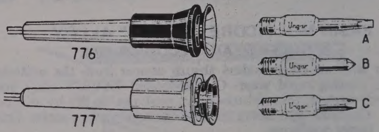
Cat. 67-6800 Safety Guard Iron Holder **Net $2**



PRINCESS© SOLDERING IRONS
FOR MICROMINIATURE SOLDERING

For damage-free, precision soldering of miniature or microminia
components. Interchangeable handles, heat capsules and solde
tips. Heat capsules operate from 120 v-ac/dc. Cords are 6
long. †Copper alloy tip. *Iron clad, gold plated tip.

Cat. No.	See Fig.	Unit Description	Ea. 1-9	10-99
67-6902	H	Handle, 2-wire cord & plug	$4.40	$3.80
67-6903	H	Handle, 3-wire cord & plug	5.95	5.15
67-6910	G	10-watt capsule, 550-650°F.	5.35	4.65
67-6915	G	15-watt capsule, 700-800°F.	5.35	4.65
67-6918	G	18-watt capsule, 900-1000°F.	5.35	4.65
67-6950	C†	1/8" x .61", .015" dia. tip	.45	.39
67-6951	B†	1/8" x .68", .055" dia. tip	.45	.39
67-6952	A†	1/8" x .61", .080" dia. tip	.45	.39
67-6953	D†	1/8" x .61", .005" dia. tip	.90	.77
67-6960	C*	1/8" x .61", .015" dia. tip	.85	.72
67-6961	B*	1/8" x .68", .015" dia. tip	.85	.72
67-6962	A*	1/8" x .61", .080" dia. tip	.85	.72
67-6963	D*	1/8" x .61", .010" dia. tip	1.58	1.37
67-6990	I	Iron holder with sponge	4.15	3.60



UNIVERSAL HANDLES

Pencil-type handles for use with the soldering elements liste
this page. They are molded of heat resistant plastic and incorp
a stainless steel heat shield. Model 776 has a cork grip, Model
hexagon shaped polypropylene grip. Both are furnished w
vinyl covered power cord and plug. UL approved.

Cat. No.	Unit Description	Ea. 1-9	10-99
67-776	Standard Handle	$2.15	$1.80
67-777	Clean Room Handle	2.15	1.80

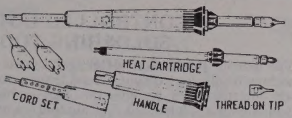
INTERCHANGEABLE HEATERS

For use in the handles above. Heating elements are enclosed
high impact resistant ceramic. Soldering tips are: †Tellurium
per; ‡ARMCO iron, silver plated; *Tellurium copper, iron cla
silver plated. UL approved for 120 v-ac/dc operation.

Cat. No.	See Fig.	Watts	Tip Dia.	Tip Temp.	Ea. 1-9	10-99
67-533†	A	23½	.312"	650-700°F.	$1.85	$1.55
67-536†	B	23½	.312"	650-700°F.	1.85	1.55
67-539†	C	23½	.312"	650-700°F.	1.85	1.55
67-1233†	A	37½	.375"	750-800°F.	2.70	2.25
67-1236‡	B	37½	.312"	750-800°F.	2.70	2.25
67-1239‡	C	37½	.375"	750-800°F.	2.70	2.25
67-4033*	A	47½	.395"	850-1000°F.	3.95	3.25
67-4036*	B	47½	.395"	850-1000°F.	3.95	3.25
67-4039*	C	47½	.395"	850-1000°F.	3.95	3.25

UNGAR SOLDERING TOOLS

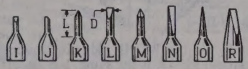
IMPERIAL© SOLDERING IRONS FOR INDUSTRY & SERVICE



UL approved for production, maintenance and service uses. Handles, cord sets, heat capsules and tip shapes permit the choice of a combination best suited for every use. Die-cast Lexan handles have built-in heat barrier. Heat capsules are stainless steel clad. Interchangeable soldering tips are †copper alloy or *iron clad, gold plated. For 120 v-ac/dc operation.

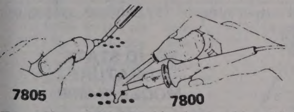
Cat. No.	Unit Description	Ea. 1-9	10-99	100 Up
67-6100	Handle, turquoise	$2.00	$1.65	$1.50
67-6102	Cord-set, 2-wire, turquoise	2.90	2.50	2.20
67-6103	Cord set, 3-wire, turquoise	4.25	3.45	3.20
67-6202	25-w, heat capsule, 600-800°F.	5.35	4.35	4.05
67-6201	30-w, heat capsule, 650-850°F.	5.35	4.35	4.05
67-6200	40-w, heat capsule, 750-950°F.	5.35	4.35	4.05
67-6203	60-w, heat capsule, 850-1150°F.	6.35	5.15	4.75

TIPS FOR IMPERIAL IRONS



Thread-on soldering tips for use with the IMPERIAL© heat capsules listed above. †Copper alloy, *Iron clad, gold plated. "Tip D" indicates the diameter or width of tip at soldering point.

Cat. No.	See Fig.	Tip Shape	Tip D	Ea. 1-9	10-99	100-Up
67-6304	I*	Micro-chisel	.055"	$1.40	$1.13	$1.05
67-6305	J*	Micro-spade	.055"	1.40	1.13	1.05
67-6312	K†	Pencil	.010"	.61	.50	.46
67-6313	K*	Pencil	.040"	1.40	1.13	1.05
67-6316	—*	Offset pencil	.040"	1.40	1.13	1.05
67-6318	L†	Long chisel	.125"	.61	.50	.46
67-6319	L*	Long chisel	.130"	1.40	1.13	1.05
67-6324	M†	Long pyramid	.010"	.61	.50	.46
67-6325	M*	Long pyramid	.020"	1.40	1.13	1.05
67-6331	N*	Screw driver	.130"	1.40	1.13	1.05
67-6333	O*	Long pencil	.035"	1.40	1.13	1.05
67-6366	L*	Long chisel	.130"	1.65	1.33	1.23
67-6368	M†	Long pyramid	.040"	.75	.61	.56
67-6473	R†	Long chisel	.187"	.75	.61	.56
67-6481	N*	Tapered screw driver	.082"	1.40	1.13	1.05
67-6482	—*	Stepped microspade	.050"	1.40	1.13	1.05



DE-SOLDERING TOOLS

For safe removal of solder from soldered joints, terminals, etc., by means of a vacuum created by a rubber bulb. Model 7805 is for use with any soldering iron. Standard Model 7800 is complete with heating element, handle, etc. For operation on 120 v-ac/dc.

Cat. No.	Unit Description	Net 1-9	10-99	100-Up
67-7805	Bulb and tip only	$1.60	$1.30	$1.20
67-7800	Standard "Hot-Vac"	14.25	11.70	10.70

ACCESSORIES

Anti-Seize Compound minimizes sticking of high temperature tips. Sponge and Tray keeps tips clean and in good soldering condition.

Cat. No.	Description	Ea. 1-9	10-99	100-Up
67-8001	Anti-Seize	$0.95	$0.80	$0.70
67-400	Sponge & Tray	1.40	1.15	1.05

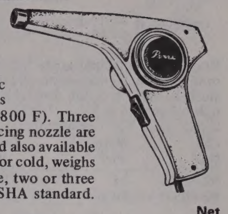
6982

6983

IC AND TO-5 EXTRACTORS

Model 6982 is a safe, fast extractor for Dual In-Line IC's, use with No. 6948 Slotted Bar De-Solder Tip. Model 6983 is used to extract devices housed in the standard TO-5 configuration, also acts as heat sink.

Cat. No.	Description	Net 1-9	10-99	100-Up
67-6982	Dual In-Line IC extractor	$2.35	$2.00	$1.80
67-6983	TO-5 extractor	2.70	2.40	2.10



HEAT GUN

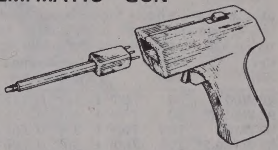
Specifically built for electronic assembly, the 3/8" nozzle enables precise, accurate heat flow (750-800 F). Three reflectors and one .200 dia. reducing nozzle are standard. Self-standing. Hold Stand also available for hands-free work. Operates hot or cold, weighs 18 oz., cool glass-filled plastic case, two or three wire cord, NEMA plug. Meets OSHA standard.

Cat. No.	Description	Net Ea.
67-6955	2-Wire Model, 3 reflectors, 1 baffle standard	$39.95
67-6966	3-Wire Model, 3 reflectors, 1 baffle standard	42.00
67-6965	Holder and Storage Tray	3.00

WELLER TOOLS

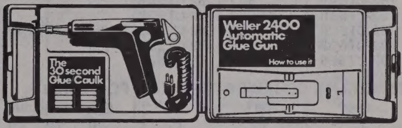
NEW TEMPMATIC® GUN

TEMPERATURE CONTROLLED SOLDERING TOOL



This tool employs both a fast heating soldering gun and a small frame pencil type iron. Trigger action heating. Temp. controlled Powerhead with convenient ejector for changing powerheads. Lightweight weighs only 7 oz. For light and heavy soldering. Stainless steel long reach barrel. Points have premium plating for extended life. For 120 v-ac, 50-60 Hz operation.

Cat. 92-W-GT7A	W/700°F. 3/16" chisel point	Net $14.75
Cat. 92-W-GT6B	W/600°F. 1/8" conical point	Net $14.75



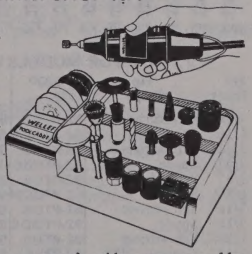
AUTOMATIC GLUE GUN

This new automatic electric glue and caulk gun features rapid heat up in 30 seconds, an indicator and work light, automatic glue feed, and is drip-proof with automatic flow control valve. Power consumption 150 watts at 120 volts. The model 2400K Glue gun Kit includes one Model 2400 Glue and Caulk Gun, 7 Weller Glue Sticks, 7 Weller Caulk Sticks, a Portable Bench Stand, a Reversible Storage Tray, a Carrying Case and Instruction Book.

Cat. No.	Unit Description	Ea. 1-2	3-5	6-Up
92-2400K	Glue Gun Kit	$9.95	$8.95	$7.95
Cat. 92-AC-400	20 Glue Sticks in Blister Pack			Net $1.20
Cat. 92-AC-401	60 Glue Sticks, Boxed			Net $2.59
Cat. 92-AC-402	20 Caulk Sticks, Blister Pack			Net $1.20
Cat. 92-AC-403	60 Caulk Sticks, Boxed			Net $2.59

WELLER MINI-SHOP KIT

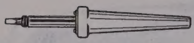
GRIND, SHARPEN, POLISH CLEAN, SAND, SHAPE, DRILL, ROUT, CUT, SAW



Powered by a 25,000 rpm, 115 volt, .75 amp motor, the Mini-Shop is ideal for handymen, hobbyists and professionals. It's small and easy to handle—perfect for delicate work and hard-to-reach-places. The wide selection of bits helps you build, repair and clean faster and easier than ever before. 37-Piece Kit contains: power unit, storage case, owner's guide, accessory caddy, (8) grinding/sharpening bits, (3) polishing wheels, (4) cleaning bits, (8) abrasive discs, (3) abrasive bands, (1) expanding drum, (1) drill bit, (1) mandrel, (1) chuck wrench, (1) dressing stone, (1) plastic polish, and (1) jeweler's rouge.

Cat. 92-600K	Weller Mini-Shop Kit	Net $29.85

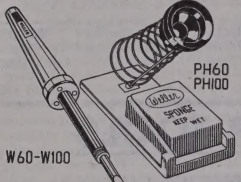
WELLER SOLDERING TOOLS



PENCIL IRONS
WP25 & WP40

Rugged, professional grade industrial soldering tools for use with miniature, and micro-miniature components. They feature stainless steel barrels, long-life interchangeable double-coated tips, and unbreakable blue plastic handles. Supplied with 2-wire power cord and plug for 120 v-ac operation.

Cat. No.	Watts Pwr.	Description	Ea. 1-11	12-47	48-Up
92-WP25	25	With 1/16" (ST1) tip	**$5.15**	**$4.65**	**$4.15**
92-WP40	40	With 1/8" (ST3) tip	**6.15**	**5.55**	**4.95**



PORTABLE
W60 & W100

Compact, general purpose soldering tools for 120 v-ac operation. Temperature range (from 600°F. to 800°F.) is changeable and is determined by the type of tip used in the soldering tool. These tools have a high heat volume and a fast recovery rate. Supplied with a 2-wire or 3-wire power cord and plug. Stands have a heavy, non-sliding cast base, built-in sponge, and a non-sinking spring and funnel to hold the soldering tool. *3-wire.

Cat. No.	Watts Pwr.	Tip Temperature & Tip Supplied	Ea. 1-11	12-47	48-Up
92-W60	60	700° F. 1/4" (CT5E7)	**$12.60**	**$11.40**	**10.15**
92-W60-3*	60	700° F. 1/4" (CT5E7)	**13.60**	**12.30**	**10.95**
92-W100	100	700° F. 3/8" (CT6F7)	**15.80**	**14.25**	**12.65**
92-W100-3*	100	700° F. 3/8" (CT6F7)	**16.80**	**15.15**	**13.50**
92-PH60	Stand with sponge for W60		**5.30**	**4.80**	**4.25**
92-PH100	Stand with sponge for W100		**6.40**	**5.75**	**5.15**

1/4" SHANK/SCREWDRIVER TIPS FOR W60

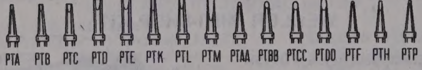
Tip Point	600° F.	700° F.	800° F.	Ea. 1-24	25-99	100-Up
1/16"	92-CT5A6	92-CT5A7	92-CT5A8	$1.05	$0.95	$0.85
3/32"	92-CT5B6	92-CT5B7	92-CT5B8			
1/8"	92-CT5C6	92-CT5C7	92-CT5C8			
3/16"	92-CT5D6	92-CT5D7	92-CT5D8			
1/4"	92-CT5E6	92-CT5E7	92-CT5E8			

3/8" SHANK SCREWDRIVER TIPS FOR W100

Tip Point	600° F.	700° F.	800° F.	Ea. 1-14	15-49	50-Up
1/8"	92-CT6C6	92-CT6C7	92-CT6C8	$1.65	$1.50	$1.35
3/16"	92-CT6D6	92-CT6D7	92-CT6D8			
1/4"	92-CT6E6	92-CT6E7	92-CT6E8			
3/8"	92-CT6F6	92-CT6F7	92-CT6F8			

REPLACEMENT TIPS FOR WP25 & WP40

Cat. No.	Description	Ea. 1-11	12-47	48-Up
92-ST1	1/16" screwdriver tip	**$0.88**	**$0.79**	**$0.71**
92-ST2	3/32" screwdriver tip			
92-ST3	1/8" screwdriver tip			
92-ST4	3/16" screwdriver tip			

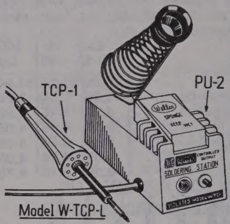


PT TIPS FOR MODELS W-TCP, W-TCP-L, TCP-1

Tip Point	Tip Shape	600° F.	700° F.	800° F.	Net Ea.
1/16"	Screwdriver	92-PTA6	92-PTA7	92-PTA8	
1/16"	Spade	92-PTAA6	92-PTAA7	92-PTAA8	
3/32"	Screwdriver	92-PTB6	92-PTB7	92-PTB8	1-24
3/32"	Spade	92-PTBB6	92-PTBB7	92-PTBB8	$1.05
1/8"	Screwdriver	92-PTC6	92-PTC7	92-PTC8	
1/8"	Spade	92-PTCC6	92-PTCC7	92-PTCC8	25-99
3/16"	Screwdriver	92-PTD6	92-PTD7	92-PTD8	$0.95
3/16"	Spade	92-PTDD6	92-PTDD7	92-PTDD8	
1/32"	Screwdriver	92-PTH6	92-PTH7	92-PTH8	100-Up
1/32"	Conical	92-PTP6	92-PTP7	92-PTP8	$0.85
1/32"	Conical flat	92-PTF6	92-PTF7	92-PTF8	
15/64"	Screwdriver	92-PTE6	92-PTE7	92-PTE8	
3/64"	Long screwdriver	92-PTK6	92-PTK7	92-PTK8	
5/64"	Long screwdriver	92-PTL6	92-PTL7	92-PTL8	
1/8"	Long screwdriver	92-PTM6	92-PTM7	92-PTM8	

CONTROLLED OUTPUT SOLDERING TOOLS

For general production soldering. "Closed Loop" control syst automatically controls output and temperature. Idling temperatu are determined by tip selection. Tips are high conductivity cop which are iron plated and then aluminized in the non-working a the iron tip then pre-tinned. Temperature sensing tips contai small ferromagnetic sensing element on the shank which holds idling temperature to 600°, 700° or 800° F. Changing tips ada the tool to an entirely different temperature range.



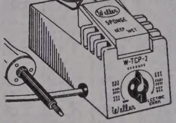
MODEL TCP-1

Soldering pencil only, w silicone rubber cord. Oper from any 24 volt po source, or for use with PU and PU-2 power units. C sumes 48 watts. Less sol ing tip.

POWER UNITS

For operating TCP-1 pe from 120 v-ac, 50-400 H 60 watts. Model PU-2 feat an isolation transformer, off switch, pilot light, tip cleaning sponge, and non-sinking holder. Model PU-1A is the same, less on/off switch and pilot li

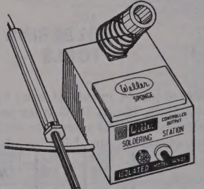
Cat. No.	Description	Ea. 1-11	12-23	
92-TCP-1	Pencil only, less tip	**$13.40**	**$12.10**	**1**
92-W-TCP	PU-1A with TCP-1 & 700°tip	**26.16**	**23.65**	**2**
92-W-TCP-L	PU-2 with TCP-1 & 700° tip	**30.15**	**27.25**	**2**



VARIABLE HEAT
MODEL W-TCP-2
200° TO 450° F.

Designed especially for use with melting point solder only, such indium alloys having melting p below 300° F. Power unit has a less dial from which a continuously variable range of tip temp tures may be set. A thermistor and silicon controlled rect maintain the set temperature to match the work requirements. tures isolation from power line. Operates from 120 v-ac, 50 Hz, consumes 30 watts. Furnished with STB screwdriver

Cat. No.	Description	Ea. 1-11	12-23	
92-W-TCP-2	Controlled output system	**$72.30**	**$65.35**	**$5**



SOLID STATE
MINIATURE
MODEL W-MCP

A complete soldering station general micro-soldering app tions. New solid state "Cl Loop" control system aut tically controls output and perature. Available for fixed peratures of 550°, 650°, or 75 Complete soldering station sists of an MCP soldering pencil with 5/64" (MP 5C) tip, an MPU-1 power unit with isolation transformer, on/off sw pilot light, tip cleaning sponge, and convenient non-heat si stand. For operation from 120 v-ac, 50-400 Hz, power consum 20 watts. Complete with 3-wire power cord and plug.

Cat. No.	Description	Ea. 1-11	12-23	
92-W-MCP-550	With 550° F. pencil	**$35.80**	**$32.35**	**$2**
92-W-MCP-650	With 650° F. pencil			
92-W-MCP-750	With 750° F. pencil			

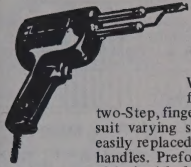
REPLACEMENT TIPS FOR W-TCP-2

Cat. No.	Description	Ea. 1-24	25-99	
92-STA	With 1/32" conical flat tip	**$1.05**	**$0.95**	**$**
92-STB	With 1/16" screwdriver tip	**1.05**	**.95**	

REPLACEMENT TIPS FOR W-MCP

92-MP1MP	.010" micropoint	**$1.05**	**$0.95**	**$**
92-MP2C	1/32" bent chisel tip			
92-MP2S	1/32" spade tip at 45°			
92-MP3C	3/64" bent chisel tip			
92-MP3S	3/64" spade tip at 45°			
92-MP5C	5/64" chisel tip			
92-MP8C	1/8" chisel tip			

WELLER

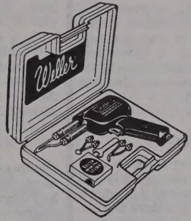


DUAL HEAT SOLDERING GUNS

Weller's exclusive dual-heat feature is controlled by the two-Step, finger-grip trigger-switch, gives instant heats to suit varying soldering needs. New high efficiency tips easily replaced. High impact plastic cases with pistol-grip handles. Prefocused spotlights eliminate shadows. Furnished with 6 ft. cord and plug.

Cat. No.	Rated Watts	Gun Description	Net 1-2	3-11
92-8200	100/140	Expert Model, dual-heat with 1 spotlight	**$8.30**	**$7.45**
92-D-440	145/210	Service Model, dual-heat with twin spotlights	**11.45**	**10.30**
92-D-550	240/325	Heavy-duty Model,dual-heat, twin spotlights	**12.30**	**11.05**

SOLDERING GUN KITS



Kits are housed in a rugged molded plastic case with removeable filler panel and a convenient handle for carrying. Each kit contains a dual-heat soldering gun, spare tips, a tip wrench, all-purpose solder, and an instruction booklet. Case has extra space for small tools, may also be used for fishing tackle, etc. For operation from 110-125 v-ac 50-60 cps.

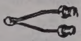
Cat. No.	With Gun	Rated Watts	Kit Contains	Net 1-2	3-11
92-8200PK	8200	100/140	Solder gun, spare tips, solder	**$9.95**	**$8.95**
92-D-550PK	D-550	240/325	Solder gun, spare tips, solder	**14.95**	**13.45**

REPLACEMENT TIPS FOR WELLER GUNS

7135

7250

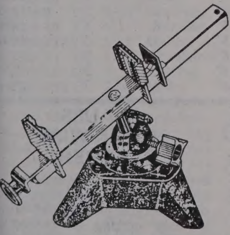
6120



6110

Fabricated from copper for maximum heat transfer. *Premium plated for longer life. Cutting and smoothing tips are for use in cutting, forming and smoothing plastics.

Cat. No.	Use For	For Use With Weller Models	Net Pkg. of
92-7300	Soldering	B, S-107, D-207	**2 for $.79**
92-8125	Soldering*	8200, 8100B	**2 for .79**
92-8125N	Soldering*	Same as 8125 but with tip lock-nuts	**1 for .79**
92-7135	Soldering	WS-100, WD-135, S-400, D-440, 8100	**2 for .79**
92-7135N	Soldering	Same as 7135 but with tip lock-nuts	**1 for .79**
92-7250	Soldering	WS-200, WD-250, S-500, D-550, 8250A	**2 for .79**
92-7250N	Soldering	Same as 7250 but with tip lock-nuts	**1 for .79**
92-6110	Cutting	WS100, WD-135, S-400,D-440,8100,8200,8100B	**1 for .79**
92-6120	Smoothing	WS100, WD-135, S-400,D440,8100,8200,8100B	**1 for .79**
92-6130	Cutting	WS200, WD-250, S-500,D-550, 8250A	**1 for .79**
92-6140	Smoothing	WS200, WD-250, S-500,D-550, 8250A	**1 for .79**

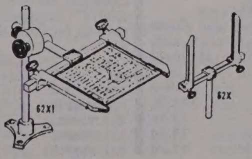


HUNTER QUICK ADJUST VISE FOR P-C BOARDS

A fully positionable, quick adjusting assembly for holding delicate electronic assemblies securely and safely during repairs or adjustments. Consists of a heavy cast iron base, a ball-type vise, and a spring-loaded, quick adjusting assembly into which the printed circuit board is inserted.

Cat.	Description	Net
371-62E4	Complete vise assembly	**$34.13**
371-62E2-1	Ball vise only	**15.75**
371-62E1	Positioning device only	**12.00**
371-62K3	Cast iron mounting base.	**7.73**

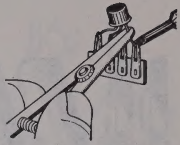
P-C BOARD HOLDERS



Designed to position printed circuit boards for easy access to all parts for adjustment or repair. Model 62X1 is for bench mounting, has screw-down base. Model 62X is for use in an existing vise or clamp device.

Cat.	Description	Net
371-62X1	Complete assembly	**$23.07**
371-62X	P-C holder only	**10.95**

G-C HEAT SINK PLIERS



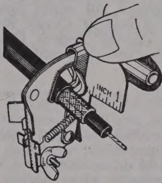
Protects delicate components and instruments during soldering operations. Made of aluminum for rapid heat dissipation. Spring loaded to provide firm grip.

Cat. 59-9077 Each **Net $.39**

Z5 SILICONE COMPOUND

For use with transistors and semiconductors to maintain efficient transfer of heat from unit to chassis or heat sink. Silicone compound is used for original installations and replacements. Supplied in 1 ounce tubes.

Cat. 59-8101 Each **Net $2.39**

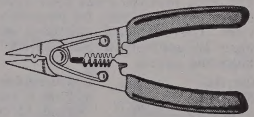


BLONDER TONGUE ROTARY RG/U CABLE STRIPPER

Strips all coaxial cables up to ½" diameter easily and cleanly. Uses ordinary, easily replaceable, single-edge razor blade. Has scale for exact stripping measurements. Holds cable securely under spring tension. Heavy gauge steel construction.

Cat. 379-S-1 Each **Net$3.35**

NEW HUNTER 4-IN-1 TOOL



IT CUTS, BENDS, CRIMPS AND STRIPS

Has a serrated needle nose jaw for gripping pulling, and bending wire. Has a crimper for all types of solderless terminals. Handy cutter to handle a variety of wire sizes. Six convenient holes for stripping AWG solid wires in gages 12 through 22 and standard wires 14 through 24. Made of high carbon steel fully heat treated for your assurance of a sturdy, long lasting tool with rust resistant black oxide finish. The 6½" handle is rolled and dipped in a heavy plastic to provide a ¼" comfortable cushioned grip.

Cat. 371-55 Stripper **Net $2.90**

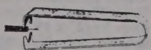
ADJUSTABLE TYPE

STRIPPER & CUTTER

A handy wire stripper and cutter made of hardened tool steel. Slide lock adjustment avoids damaging of wire when used for repetitive stripping. 5" long.

Cat. 76-68 Stripper **Net $1.40**

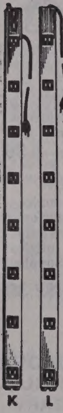
JIFFY STRIPPER

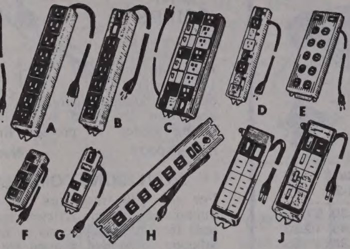


A squeeze, a twist, a pull and the wire is stripped. Made of hardened spring steel.

Cat. 76-65 Jiffy Strip **Net $.40**

WABER OUTLET BOXES





POWER CONTROL CENTERS
FOR THE HOME, LAB, OR SCHOOL

All Waber Outlet Boxes are rated at 15 amperes, 130 volts continuous duty, UL approved components. Tough neoprene cord-sets. Steel case finished in gray textured hammertone. All except figures A,F & L have Panel Mounted fuse or Circuit Breaker, Bright Neon Pilot Light, "On-Off" Switch, 6' or 15' cord-sets. Ideal for use anywhere extra outlets are needed.

"IN–LINE" TYPE "U" GROUND

This type has line cord on one end and connecting outlet on the other end. This enables you to string these units, very quickly and economically around walls, lab, tables, etc. Pre-wired for immediate use. Model 15 is the control unit. Model 17 is a slave but can be used independently where outlets only are required. Size: 13-1/8" x 2-3/8" x 1-5/8". 12-3/4" mounting centers.

Cat. No.	Fig.	Description	Net
391-15	B	Fuse, 6' cord-set	$ 9.62
391-15-15	B	Fuse, 15' cord-set	10.73
391-15CB	B	Crct. brkr., 6' cord-set	10.73
391-15CB-15	B	Crct. brkr., 15' cord-set	11.84
391-17	A	6' cord-set	7.42
391-17-15	A	15' cord-set	8.54

DELUXE POWER CONTROL CENTER

This type provides seven color keyed switch-outlet groups. Has center "write-on" strip for immediate identification. "U" ground type. The individual switching provides real convenience in many lab applications. Size: 13-1/8" x 4-3/4" x 1-5/8".12-3/4" mounting centers.

Cat. No.	Fig.	Description	Net
391-24	B	Fuse, 6' cord set	$10.75
391-24-15	B	Fuse, 15' cord set	12.30
391-24CB	B	Circuit breaker, 6' cord set	12.30
391-24CB-15	B	Circuit breaker, 15' cord set	13.85

"POWER POINTER" CONTROL BOXES

This type provides a bright neon pilot light with each switch to show when power is on. These sparkling models offer real convenience and utility in many applications. "U" ground type. Size: 13-1/8" x 2-3/8" x 1-5/8". 12-3/4" mounting centers.

Cat. No.	Fig.	Description	Net
391-32P	D	Fuse, 6' cord-set	$11.55
391-32P-15	D	Fuse, 15' cord-set	12.21

DUPLEX MASTER POWER CONTROLS

Ten duplex outlets in "U" ground types are provided with "on-off" switch, neon pilot light, panel mounted fuse or circuit breaker. The sturdy steel case is of seamless design. Size: 13-1/4" x 4-1/4" x 1-1/2". 12-7/8" x 2-7/8" mounting centers.

Cat. No.	Fig.	Description	Net
391-800	E	Fuse, 6' cord-set	$14.85
391-800-15	E	Fuse, 15' cord-set	15.95
391-800CB	E	Crct. brkr., 6' cord-set	15.95
391-800CB-15	E	Crct. brkr., 15' cord-set	15.65

RACK MOUNTS CONTROL PANEL

Pre-wired Master Power Controls provide a quick and easy power source for standard relay racks. You get plently of outlets, with "on-off" switch, pilot light and your choice of 6' or 15' cord. Size: 3-1/2" x 19".

Cat. No.	Fig.	Description	Net
391-900	H	Fuse, 6' cord-set	$12.05
391-900-15	H	Fuse, 15' cord-set	13.14
391-900CB	H	Crct. brkr., 6' cord-set	13.14
391-900CB-15	H	Crct. brkr., 15' cord-set	14.24

LONG JOHN SERIES

All of these handsome 4 ft. models are prewired, ready for inst
use, are "U" ground types, all in a sturdy, seamless steel c
Type 700 has 8 outlets, on-off switch and bright pilot light. T
710 has 8 outlets only. Size: 49" x 2" x 1-1/2". Mounting cen
48-3/3".

Cat. No.	Fig.	Description	
391-700	K	Fuse, 6' cord-set	$16
391-700-15	K	Fuse, 15' cord-set	17
391-700CB	K	Crct. brkr., 6' cord-set	17
391-700CB-15	K	Crct. brkr., 15' cord-set	18
391-710	L	6' cord-set	14
391-710-15	L	15' cord-set	15

ELECTRICAL CONTROL CENTER

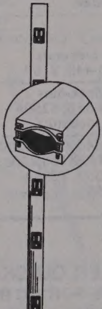
Check the fine qualities of both of these units, from the hands
chrome case to the generous 10 foot cord made of tough, h
duty oil and heat resistant neoprene. These units are conservati
rated for 15 amperes, 130 volts, continuous duty. A bui
circuit breaker, with push-to-reset button protects against
load. Model 11 has six heavy-duty outlets with on-off sw
plus a bright pilot light. Model 12 has four heavy-duty ou
with a separate switch for each outlet. Each outlet and sw
for each outlet. Each outlet and switch are color coded bl
red, white and gray.

Cat. No.	Fig.	Description	
391-11	I	With six outlets, switch & pilot light	$
391-12	J	With four color coded switches & outlets	

COMPACT "U" GROUND TYPE

Compact in size, these sturdy units provide four outlets with
same quality as its big brothers. Size: 8-5/8" x 2-1/4" x 1-1
8-1/4" mounting centers. Models 605, 606 have switches and or
indicators.

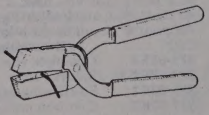
Cat. No.	Fig.	Description	
391-602	F	6' cord set	$
391-602-15	F	15' cord set	
391-603	B	Fuse, 6' cord set	
391-603-15	B	Fuse, 15' cord set	
391-603CB	B	Circuit breaker, 6' cord set	
391-603CB-15	B	Circuit breaker, 15' cord set	
391-605	B	Fuse, 6' cord set	
391-605CB	B	Circuit breaker, 6' cord set	
391-605CB-15	B	Circuit breaker, 15' cord set	
391-608	B	Fuse, 6' cord set	
391-608CB	B	Circuit breaker, 6' cord set	
391-608CB-15	B	Circuit breaker, 15' cord set	



READY TO WIRE IN OUTLET STRI

When the application calls for an outlet strip
wired into a fixed installation this series is i
Make your choice from the wide range shown
Many "U" ground outlets or few outlets. .
strip or short strip. Mounting is easy. Bo
cover is screwed to bench, back wall, or whe
outlet strip is wanted. After connections are r
top cover is mounted to bottom plate wit
tappers. Size is 1-5/8" wide x 1-3/8" deep. C
of sturdy steel finished in hammertone

Cat. No.	Lgth.	Outlets	Ctrs.	
391-4305	3'	5	3	$
391-4309	3'	9	3	
391-4407	4'	7	3	
391-4413	4'	13	3	
391-4508	5'	8	3	
391-4515	5'	15	3	
391-4607	6'	7	3	
391-4610	6'	10	3	
391-4619	6'	19	3	

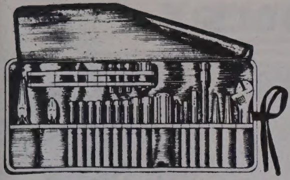


CLAUSS NO-NIK WIRE STRIPPERS

Precision tools designed t
and strip the insulation
only one size of insulated
without nicking or othe
damaging the conductor. Precision cutting apertures accura
.00015". Insulated handles are color coded, and the size p
marked for easy identification. Tool length 5¼". Shipping
lbs.

Cat. No.	AWG Size	Handle Color	Cat. No.	AWG Size	H
431-NN054	#18	Clear	431-NN016	#28	C
431-NN037	#20	Grey	431-NN014	#30	Dk.
431-NN031	#22	Tan	431-NN012	#32	
431-NN025	#24	Lt. Green			
431-NN018	#26	Yellow	Net Each		$

XCELITE TOOLS



99SM SERVICE MASTER

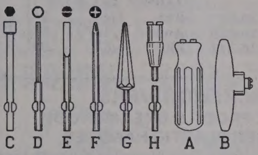
A 23-piece set of quick-change tools in a durable, roll-up plastic-coated canvas case. Contains 52G 6" long nose pliers, 55CG 5" diagonal cutters, 46C 6" thin-pattern adjustable wrench. 99-1 regular handle, 99-3 stubby handle, 99-6 thru 99-16 nutdriver blades, 99-S8, 99-S10 and 99-S12 stubby nutdriver blades, 99-821 Phillips screwdriver, 99-811 and 99-250 regular slot screwdrivers, 99-38 and 99-39 reamers, 99-X10 extension blade, and canvas roll-case. For blade sizes see the blade listing below.

Cat. 75-99SM Set **Net $29.63**

99PR SET

A 14-piece nut and screwdriver set in a roll-up case. Contains 99-1 regular handle, 99-6 thru 99-12, 99-14 and 99-16 nutdriver blades, 99-811 and 99-250 slot screwdriver blades, 99-821 and 99-822 Phillips screwdrivers, and roll-up case. For blade sizes see listing below.

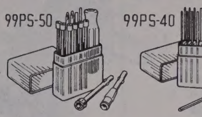
Cat. 75-99PR Set **Net $10.35**



SERIES 99 BLADES & HANDLES

Available singly or in kits as listed above. Handles A (regular 1-1/16" x 4-1/8", stubby 1-1/16" x 2"), Tee B (3-1/2" x 1-1/8"), blades for hex nuts (C), Allen hex (D), slotted screws (E) or Phillips (F). Extension blades (H) fit handles, accept screwdriver or nutdriver blades.

Cat. No.	See Fig.	Description	Net Each
75-99-1	A	Regular handle	**$0.84**
75-99-3	A	Stubby handle	**.77**
75-99-4	B	Tee handle	**1.11**
75-99-6	C	3/16" nutdriver	**.77**
75-99-7	C	7/32" nutdriver	**.77**
75-99-8	C	1/4" nutdriver	**.77**
75-99-S8	C	1/4" stubby	**.64**
75-99-9	C	9/32" nutdriver	**.77**
75-99-10	C	5/16" nutdriver	**.77**
75-99-S10	C	5/16" stubby	**.64**
75-99-11	C	11/32" nutdriver	**.77**
75-99-12	C	3/8" nutdriver	**.77**
75-99-S12	C	3/8" stubby	**.64**
75-99-14	C	7/16" nutdriver	**.94**
75-99-16	C	1/2" nutdriver	**.94**
75-99-20	D	.050" Allen hex	**.70**
75-99-21	D	1/16" Allen hex	**.70**
75-99-22	D	5/64" Allen hex	**.70**
75-99-23	D	3/32" Allen hex	**.70**
75-99-764	D	7/64" Allen hex	**.70**
75-99-24	D	1/8" Allen hex	**.70**
75-99-964	D	9/64" Allen hex	**.70**
75-99-25	D	5/32" Allen hex	**.70**
75-99-26	D	3/16" Allen hex	**.70**
75-99-811	E	3/16" slot driver	**.77**
75-99-250	E	1/4" slot driver	**.77**
75-99-312	E	5/16" slot driver	**.77**
75-99-821	F	#1 Phillips	**.77**
75-99-822	F	#2 Phillips	**.77**
75-99-38	G	1/8"-3/8" reamer	**2.02**
75-99-39	G	1/4"-1/2" reamer	**2.53**
75-99-X5	H	4" extension blade	**1.11**
75-99-X10	H	7" extension blade	**1.21**



COMPACT TOOL SET MODEL 99PS-50

A 14-piece nutdriver and screwdriver set in a compact, see-thru plastic case for bench or tool kit. Contains 99-1 regular handle, one each of 99-6 thru 99-12 nutdriver blades, 99-811 and 99-250 slot screwdriver blades, 99-821 and 99-822 Phillips screwdrivers, and 99-X5 extension blade.

Cat. 75-99PS-50 Set **Net $9.60**

MODEL 99PS-40

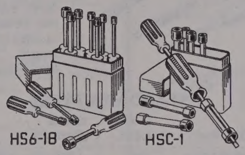
An 11-piece Allen hex screwdriver set in a see-thru case. Contains 99-1 regular handle, and one each of 99-20, 99-21, 99-22, 99-23, 99-764, 99-24, 99-964, 99-25 and 99-26 Allen hex type blades.

Cat. 75-99PS-40 Set **Net $7.80**

NEW REVERSIBLE RATCHET HANDLES

For use with any of the Series 99 Blades listed at the left. Made of black plastic. Action can be reversed without removing blade.

Cat. No.	Description	Ea. 1-4	Ea. 5
75-99-1-R	Regular	**$5.57**	**$4.95**
75-99-4-R	Tee type	**5.57**	**4.95**



"KEEP AND CARRY" MODEL HS6-18

For bench and tool kit. Attractive yellow case with slipover cover keeps tools in place. Contains one each of 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2" and 9/16" hollow shaft nutdrivers.

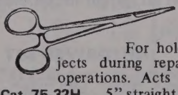
Cat. 75-HS6-18 Set **Net $12.30**

HSC-1 THRU-DRILLED NUTDRIVER SET

Handle and interchangeable nutdriver blades are drilled thru their length to permit insertion of a thin-blade screwdriver for use where a set-screw and lock nut are combined. Handle is amber plastic. Blades snap-lock into place. Includes blades for 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2" and 9/16" hext nuts

3/8", 7/16", 1/2" and 9/16" hex nuts. Screwdriver not supplied.

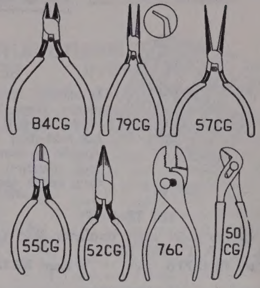
Cat. 75-HSC-1 Set **Net $9.75**



"SEIZER"

For holding small objects during repair or service operations. Acts as heat sink.

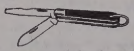
Cat. 75-32H	5" straight	**Net $4.53**
Cat. 75-33H	5" curved	**Net $4.66**
Cat. 75-42H	6" straight	**Net $4.66**
Cat. 75-43H	6" curved	**Net $4.80**



CUSHION GRIP PLIERS

For electronic, electrical and general repair and service. Models 84CG, 79CG and 57CG are spring opening. Model 84CG has sharp pointed jaws, snip-cuts in close places. Model 76C doe not have cushion grip.

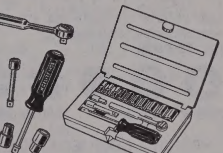
Cat. No.	Description	Net Each
75-84CG	4" flush cutting	**$5.28**
75-79CG	5" bent chain nose	**5.41**
75-57CG	5-1/2" needle nose	**4.85**
75-55CG	5" diagonal cutters	**4.04**
75-52CG	6-1/2" long nose	**3.48**
75-76C	6" slip-joint	**2.12**
75-50CG	5" midget slip-joint	**2.92**



ELECTRICIAN'S KNIFE

A sturdy tool with knife blade for cutting and trimming, and a screwdriver blade with sharp edge for scraping insulation. Blades have positive lock when open.

Cat. 75-K22 Knife **Net $3.08**



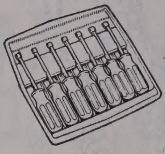
1001 1/4" SQUARE DRIVE SOCKET WRENCH SET

A 14-piece set of precision tools for the repair of radio, TV, appliance, business machine, aviation, automotive and other electronic and industrial equipment and instrumentation. Set includes a 1" x 3" handle with 2-3/4" shaft, a 4-3/4" reversible ratchet, a 5-3/4" spinner extension, a 2" extension, 1" long hex sockets for 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16" and 1/2", and also 1" long sockets (10 pt.) for 1/4" and 5/16". These fit either square or hex nuts snugly. Sockets are forged from A.I.S.I. 4140 alloy steel and heat treated. Spinner handle may be used with sockets as a nut driver, or with ratchet and extensions for a reach of up to 9-1/4". All components are contained in a handsome molded green plastic case with compartments for each part. Ratchet is fully enclosed for protection against dirt and grit. It is instantly reversible by a flick of the finger.

Cat. 75-1001 Set **Net $12.40**

Other XCELITE Precision tools such as socket wrenches, nutdriver kits, screwdrivers, pliers, and specialty tools, are also available

XCELITE SERVICE TOOLS


127TB

TB NUTDRIVER SETS

In handy, lightweight, molded plastic trays for bench, tool caddy or wall mounting. Tray has fold-away stand to hold it upright on work, table for easy tool selection. Snap-lock feature keeps the tools secure.

127 TB SET

Contains solid shaft nutdriver Nos. 6, 8, 9, 10, 11 and 12.
Cat. 75-127TB Set **Each $7.13**

147TB SET

Contains hollow shaft nutdriver HS8, HS9, HS10, HS11, HS12, HS14 and HS18.
Cat. 75-147TB Set **Each $8.94**

COMPACT TOOL SETS

In slim, see-thru plastic cases which fit the pocket, or stand upright on bench. Tools are midget size, have "piggy back" slip-over torque handle to extend reach. and provide increased driving power.

PS120 NUTDRIVER SET

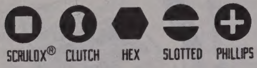
Contains nutdrivers for 3/32", 1/8", 5/32", 3/16", 7/32", ¼", 9/32", 5/16", 11/32" and 3/8" and torque handle.
Cat. 75-PS120 Set **Each $6.45**

PS7 SCREWDRIVER & NUTDRIVER SET

Contains nutdrivers for ¼" and 5/16", and screwdrivers 3/32" x 1", 3/16" x 1", Phillips #0 and Phillips #1. Includes TA2 torque amplifier handle.
Cat. 75-PS7 Set **Each $4.47**

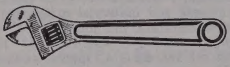
PS88 SCREWDRIVER SET

Contains screwdrivers 3/32" x 1", 1/8" x 1", 5/32" x 1", 3/16", 1", ¼" x 1", and Phillips #0, #1 and #2. Includes torque amplifier handle.
Cat. 75-PS88 Set **Each $4.65**



PS-TR-1 CONVERTIBLE SET

Contains 2 drivers for Scrulox® square recess head screws, 5/32 clutch head screw driver, 1/4 hex head driver, plus No. 1 and No. 2 Phillips drivers, and two popular sizes of slotted drivers.
Cat. 75-PS-TR-1 Set **Net $6.18**



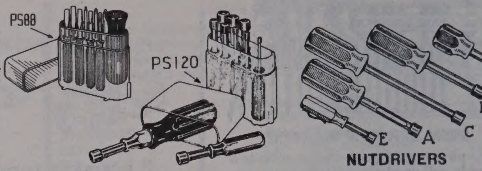
ADJUSTABLE WRENCH

A thin-pattern, adjustable jaw opening wrench for access to close-pattern work. Made of chrome-plated forged alloy steel. Polished heads. Jaw opening dimensions are approximate maximum.

Cat. No.	Jaws Open	O'All Lgth.	Net Ea.
75-44CG	½"	4"	**$3.78**
75-46CG	¾"	6"	**3.82**
75-48CG	7/8"	8"	**4.34**

OTHER XCELITE TOOLS

Many of them special, are available for home, electrical, electronic, automotive use. For a complete listing ask for an XCELITE Catalog.



INSULATED NUTDRIVERS

With shockproof, breakproof, UL approved plastic handles. Polished-plated, high car steel shafts. Precision, cold-drawn, case-hardened sockets. Handles are color co

HOLLOW SHAFT (A) 6-7/8"

Cat. No.	Color	Hex Size	Net Ea.	10 For
75-HS6	Black	3/16"	**$1.18**	**$10.50**
75-HS7	Brown	7/32"	**1.18**	**10.50**
75-HS8	Red	1/4"	**1.18**	**10.50**
75-HS9	Orange	9/32"	**1.18**	**10.50**
75-HS10	Amber	5/16"	**1.18**	**10.50**
75-HS11	Green	11/32"	**1.18**	**10.50**
75-HS12	Blue	3/8"	**1.18**	**10.50**
75-HS13	Amber	13/32"	**1.48**	**13.20**
75-HS14	Brown	7/16"	**1.48**	**13.20**
75-HS15	Amber	15/32"	**1.48**	**13.20**
75-HS16	Red	1/2"	**1.48**	**13.20**
75-HS17	Amber	17/32"	**1.55**	**13.80**
75-HS18	Orange	9/16"	**1.55**	**13.80**
75-HS19	Amber	19/32"	**1.72**	**15.30**
75-HS20	Amber	5/8"	**1.72**	**15.30**
75-HS22	Amber	11/16"	**2.70**	**24.00**
75-HS24	Amber	3/4"	**2.70**	**24.00**

Nutdrivers are also available with clip for pocket use. See XCELITE Catalog.

REGULAR (B) 6"

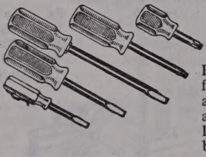
Cat. No.	Color	Hex Size	Net Ea.	
75-6	Black	3/16"	**$1.04**	**$9**
75-7	Brown	7/32"	**1.04**	**9**
75-8	Red	1/4"	**1.04**	**9**
75-9	Orange	9/32"	**1.04**	**9**
75-10	Amber	5/16"	**1.04**	**9**
75-11	Green	11/32"	**1.04**	**9**
75-12	Blue	3/8"	**1.04**	**9**
75-14	Brown	7/16"	**1.31**	**11**
75-16	Red	1/2"	**1.31**	**11**

EXTRA LONG (C) 9"

Cat. No.	Color	Hex Size	Net Ea.	
75-A8	Red	1/4"	**1.45**	**11**
75-A10	Amber	5/16"	**1.45**	**11**
75-A12	Blue	3/8"	**1.45**	**11**

STUBBY (D) 3-1/4"

Cat. No.	Color	Hex Size	Net Ea.
75-S8	Red	1/4"	**.91**
75-S10	Amber	5/16"	**.91**
75-S12	Blue	3/8"	**.91**



SCREWDRIVERS

SHOCK-PROOF & BREAK-PROOF AMBER PLASTIC HANDLES

For general use in every field. Blades are skillfully for from SAE 6150 Chrome Vanadium Electric Furnace and firmly imbedded in genuine Xcelite plastic. Handl ameter: *½", †¾", ‡7/8", §1", #1-1/16". **Blade d length. *These are pocket-clip types. **Dimensions ar blade diameter and length, does not include handle le

STANDARD TYPES

Cat. No.	O'All Lgth.	Blade Size	Net Ea.
75-R182†	4½"	1/8"x2"	**$0.50**
75-R184†	6½"	1/8"x4"	**.57**
75-R186†	8½"	1/8"x6"	**.64**
75-R188†	10½"	1/8"x8"	**.74**
75-R1810†	12½"	1/8"x10"	**.84**
75-R5323†	5½"	5/32"x3"	**.64**
75-R5324†	6½"	5/32"x4"	**.64**
75-R5325†	7½"	5/32"x5"	**.67**
75-R5328†	10½"	5/32"x8"	**.84**
75-R3163‡	6-5/8"	3/16"x3"	**.81**
75-R3164‡	7-5/8"	3/16"x4"	**.87**
75-R3166‡	9-5/8"	3/16"x6"	**.97**
75-R3168‡	11-5/8"	3/16"x8"	**1.11**
75-R31610‡	13-5/8"	3/16"x10"	**1.31**
75-R142§	6"	¼"x2"	**1.01**
75-R144§	8"	¼"x4"	**1.14**
75-R146§	10"	¼"x6"	**1.24**
75-R148§	12"	¼"x8"	**1.35**
75-R1410§	14"	¼"x10"	**1.41**
75-R5164#	8¼"	5/16"x4"	**1.31**
75-R5166#	10¼"	5/16"x6"	**1.41**
75-R5168#	12¼"	5/16"x8"	**1.41**

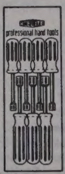
STANDARD TYPES CONT'D

Cat. No.	O'All Lgth.	Blade Size	
75-R3322*	4"	3/32"x2"	**$**
75-R3323*	5"	3/32"x3"	
75-R3324*	6"	3/32"x4"	
75-R181*	4"	1/8"x2"	
75-R183*	5"	1/8"x3"	
75-R184½*	6"	1/8"x4"	

PHILLIPS TYPES

Cat. No.	Point Size	Blade Size**	
75-X1010‡	1	3/16"x10"	**$**
75-X1020§	2	1/4"x10"	
75-X100†	0	1/8"x2"	
75-X101‡	1	3/16"x3"	
75-X108‡	1	3/16"x6"	
75-X102§	2	1/4"x4"	
75-X103#	3	5/16"x6"	
75-X104#	4	3/8"x8"	
75-SX101#	1	3/16"x1-3/8"	
75-SX102#	2	1/4"x1-3/8"	
75-P12S*	0	1/8"x2"	

PROFESSIONAL HAND TOOLS



Packaged in handy see-thru plastic cases. They fit easily into almost any tool kit, permit instant choice of the particular tool needed for each

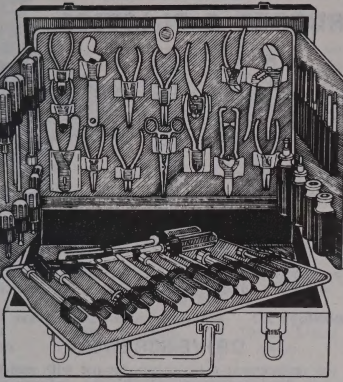
NUTDRIVER SET

Contains one each of 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", and ½". Average shaft length 3". Center hole depth 1-1/4". Color coded handles.
Cat. 75-157 Set **Net $7.20**

SCREWDRIVER SET

Contains one each of 1/8", 5, 3/16", 1/4" and 5/16" blade meters. Blade lengths 2", 3", 4 and 6" respectively. Amber har
Cat. 75-SDR-11 Set **Net**

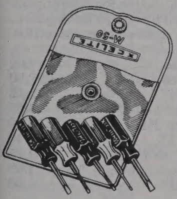
XCELITE



TECHNICIAN/SERVICEMAN'S & FIELD ENGINEER'S TOOL KIT

Consists of a quality Attache-type tool case outfitted with 57 single tools such as screwdrivers for slotted, Phillips and Allen screws, regular and magnetic nutdrivers, 99-Series interchangeable tools and handles, pliers, wrenches, and 5 unique tool sets including 99-PS-40 Allen Hex Type Set, 99-PS-60 Bristol Multiple Spline Set, M-60 Mini-driver Set, PS-120 Nutdriver Compact Set, and XL-75 Offset Ratchet Screwdriver Kit. There is ample space in the bottom of the case for test equipment, small portable electric tools, soldering equipment, parts, etc. Case has solid wood frame, 19.5" x 6.75" x 13.5", covered with attractive, tough, chestnut-brown leather grain Marvelon. Solid brass locks, latches and hardware.

Cat. 75-TC-100/ST	Tool Case With Tools	**Net $173.50**
Cat. 75-TC-100/MT	Tool Case Only	**Net $53.20**



MINI-DRIVER KITS

Miniature slotted and Phillips screwdrivers in see-thru plastic cases.

5-PIECE M-50

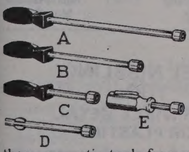
Contains one each of .040", .055", .070", .080" and .100" wide screwdrivers for slotted screws.

Cat. 75-M-50 **Net $1.85**

6-PIECE M-60

Contains one each of .040", .055", .070", .080", and .100" wide slotted head screwdrivers, and one Type M00 Phillips screwdrivers with a Type M06 Torque Amplifier Handle in a see-thru plastic case. Screwdrivers fit into Torque Amplifier Handle to increase torque turning power. Each screwdriver is a different color for easy, fast identification.

Cat. 75-M-60 **Net $2.53**

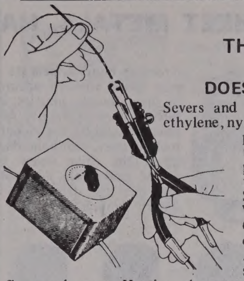


MAGNETIC NUTDRIVERS

For use with hex-head 1/4" and 5/16" steel nuts, self-tapping screws, machine screws, etc. Figures A, B and C have a newly designed, comfort-contour handle which not only provides sufficient torque, but distinguished these magnetic tools from regular nut-drivers. Fig. D is for Series 99 screwdriver assemblies. Fig. E is a vest-pocket type.

Cat. No.	See Fig.	Blade Width	Unit Description	Blade Lgth.	Net Each
75-P-8-M	E	1/4"	Midget pocket clip	1-1/4"	$1.08
75-P-10-M	E	5/16"	Midget pocket clip	1-1/4"	1.08
75-99-8-M	D	1/4"	Series 99 shank	3-5/8"	1.24
75-99-10-M	D	5/16"	Series 99 shank	3-5/8"	1.24
75-8-M	C	1/4"	Regular	3"	1.65
75-10-M	C	5/16"	Regular	3"	1.65
75-A-8-M	B	1/4"	Extra long	6"	2.09
75-A-10-M	B	5/16"	Extra long	6"	2.09
75-AA-8-M	A	1/4"	Super long	16-3/4"	4.89
75-AA-10-M	A	5/16"	Super long	16-3/4"	4.89

HUNTER TOOLS



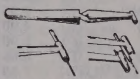
THERMAL WIRE STRIPPER

DOES NOT NICK WIRES

Severs and removes teflon, vinyl, polyethylene, nylon, dacron, rayon, polyoduct, polyester "Kel-F," or any material adaptable to thermal stripping in seconds without cutting or nicking the conductor. Strips lengths from 1/8" up. Will strip mid-wire sections. Can be used on multi-stranded or solid wires from 40 to 12 AWG, coaxial cables, wire cord sets, multi-conductor wires and flat conductors. Heating elements easily and quickly replaced. Rheostat control for any degree of heat at the tips. Overall length 8", width at tip ½". Hand tool weighs 8 oz. Total wt. 3 lbs. Operates from 115 v-ac 60 cps.

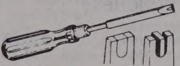
Cat. 371-80	Thermal Wire Stripper	**Net $93.38**
Cat. 371-80A	Replacement Filaments	**Net $3.15**

ANTI-WICKING TWEEZERS



Wicking is the term used to describe the capillary action which causes molten solder to climb up stranded wire. If the solder "wicks" far enough up the wire it causes the wire to become brittle and also swells and softens plastic insulation covering the wire. Anti-wicking tweezer jaws are shaped to enclose the plastic insulation and protect it while soldering. They meet Reliable Electrical Connections Standards of NASA. Special hard chrome plating engineered to resist solder sticking.

		Net Ea.
Cat. 371-C-44	For wire sizes 28 thru 30	**$7.80**
Cat. 371-C-45	For wire sizes 24 thru 26	
Cat. 371-C-46	For wire sizes 20 thru 22	
Cat. 371-C-47	For wire sizes 16 thru 18	



MAGIC TIP

SCREWDRIVERS

Fully automatic, internal cam-actuated mechanism locks positively into screw head slot. Easily released after screw is driven and turned into place.

Cat. No.	O'All Lgth.	Blade Width	Blade Lgth.	Fits Slot	Net Ea.
371-10 E-3	2½"	1/8"	1"	#00 to #2	$2.18
371-10 E-4	4"	1/8"	2¼"	#00 to #2	2.58
371-10 E-7	7"	1/8"	5¼"	#00 to #2	2.64
371-10 M-3	3½"	3/16"	½"	#3 to #6	2.04
371-10 M-5	5¼"	3/16"	2¾"	#3 to #6	2.52
371-10 M-8	8¼"	3/16"	4¾"	#3 to #6	2.78
371-10 M-12	11¼"	3/16"	7½"	#3 to #6	3.03
371-10 A	4"	1/4"	¾"	#6 to #10	2.18
371-10 B	6¼"	1/4"	3¼"	#7 to #10	2.64
371-10 C	7½"	1/4"	3¾"	#7 to #10	2.70
371-10 D	11¼"	1/4"	7"	#7 to #10	3.02

HEAT SINKS

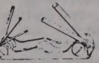
51E

For the protection of delicate components from heat during soldering operations. Handles are made of spring material to keep jaws tightly closed over wires, and covered with insulating plastic.

51F

51G

Cat.	Lgth.	Duty	Jaws	Net
371-51E	2"	Heavy	Copper	$0.86
371-51F	2"	Medium	Berylco 10	.78
371-51G	1¼"	Light	Berylco 10	.59



HUNTER "SMITTY"

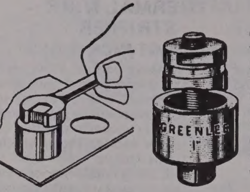
JACKNIFE HEX KEY SETS

Keeps all sizes handy and ready to use. Wrenches are cold drawn from 8650 tough alloy steel. Husky handles won't bend or break.

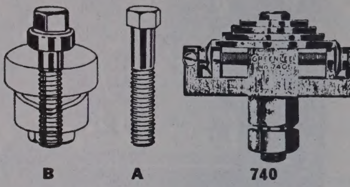
Cat.	Hex Sizes In Inches	Net
371-1P6	.050, 1/16, 5/64, 3/32, 1/8, 5/32	$1.29
371-1P3	5/32, 3/16, 7/32, 1/4, 5/16	2.69
371-1P2	7/32, 1/4, 5/16, 3/8	3.50

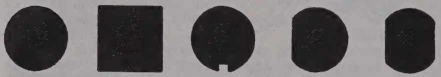
GREENLEE PUNCHES

FOR SHEET METALS, HARD RUBBER & PLASTICS



Greenlee Punches provide an easy, fast way to cut smooth, accurate openings in sheet metals, plastics, or other materials. A wide variety of shapes and sizes are available for sockets, panel controls, meters, components, etc. Simply insert the drive screw into a small drilled guide hole, assemble the punch, and turn the drive screw with an ordinary wrench.





CHASSIS PUNCHES

Letters (A), (B), (C), etc., indicate the proper replacement drive screw listed to the right.

ROUND HOLE PUNCHES

For cutting up to 16-gauge metal.

Cat. & Size		Net	Cat. & Size		Net
58-730-1/2"	(A)	$3.30	58-730-1¼"	(C)	$3.95
58-730-9/16"	(A)	3.30	58-730-1-5/16"	(C)	4.90
58-730-5/8"	(A)	3.30	58-730-1-3/8"	(C)	4.90
58-730-11/16"	(B)	3.30	58-730-1½"	(C)	5.40
58-730-3/4"	(B)	3.30	58-730-1-5/8"	(D)	6.56
58-730-13/16"	(B)	3.30	58-730-1¾"	(D)	7.50
58-730-7/8"	(B)	3.30	58-730-1-7/8"	(E)	9.25
58-730-15/16"	(C)	3.80	58-730-2"	(E)	9.90
58-730-1"	(C)	3.80	58-730-2-1/8"	(E)	10.65
58-730-1-1/16"	(C)	3.95	58-730-2¼"	(E)	11.00
58-730-1-1/8"	(C)	3.95	58-730-2½"	(E)	17.95
58-730-1-5/32"	(C)	3.95	58-730-2¾"	(F)	24.90
58-730-1-3/16"	(C)	3.95	58-730M-2-25/32"	(E)	16.35
58-730S-1-7/32"	(D)	6.80	58-730-3"	(F)	34.45

HEAVY DUTY ROUND HOLE PUNCHES

For cutting up to 10-gauge metal.

58-730X-1-1/8"	(G)	$8.05	58-730X-1-3/8"	(G)	$9.35
58-730X-1-3/16"	(G)	8.05	58-730X-1½"	(G)	10.55
58-730X-1¼"	(G)	8.05			

KEYED ROUND HOLE PUNCHES

For cutting up to 16-gauge metal.

58-732-15/32"	(M)	$8.15	58-732-1-17/64"	(P)	$10.95
58-732-15/16"	(N)	8.65	58-732-1-21/64"	(Q)	12.10
58-732-1-11/64"	(O)	9.35			

"D" HOLE PUNCHES

For cutting up to 16-gauge metal.

58-733-½"	(R)	$6.70	58-733-5/8"	(S)	$7.10

SQUARE HOLE PUNCHES

For cutting up to 16-gauge metal.

58-731-½"	(H)	$8.90	58-731-7/8"	(K)	$11.35
58-731-5/8"	(I)	8.90	58-731-1"	(L)	11.75
58-731-¾"	(J)	9.65			

DOUBLE "D" PUNCH

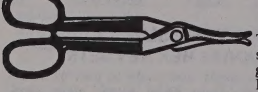
For cutting up to 10-gauge metal.

Cat. 58-734D-1-1/8" x 1-3/8" (T) **Each Net $35.15**

RELAY SOCKET PUNCHES

For Potter & Brumfield, Struthers-Dunn, and other relay sockets.

Cat. No.	Punches Hole	Net
58-731-R-1.018" x .861"	1.018" x .861"	$17.90
58-731-R-1¼" x 1-3/8"	1¼" x 1-3/8"	26.95
58-731-S-2-5/8"	2-5/8" square	103.35
58-731-S-4-1/8"	4-1/8" square	184.75



CLAUSS

STEEL SNIPS

These sturdy, fast cutting snips are ideal for use in garages, machine shops, labs, home or workshop. Designed to cut sheet metal, screen, poultry wire, leather, rubber, heavy canvas or cloth, gaskets, linoleum, plastics or fiberboard. Finished with red enameled handles and polished blades. Recommended for a max. work load of 26 ga. cold rolled steel. Length is 7" with 1.5" blade. Weight 6½ Oz.

Cat. 431-D7 Combination Ships **Net $2.75**

NO. 740 KNOCKOUT CUTTER

Used by electricians to enlarge knockouts to 1-15/16", 2-3/ 2-7/8" or 3½". Adjustable cutter blades and interchangea discs.

Cat. 58-740 In leather pouch **Net $33.**

DRIVE SCREWS

These are replacement drive screws for use with punches lis to the left. Bracketed letters (A), (B), etc., indicate which c to use for each punch. See Fig. A. above.

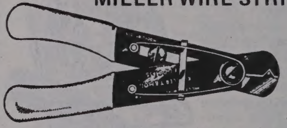
Cat. No.		Net	Cat. No.		N
58-AV-1675	(A)	$.30	58-AV-5454	(K)	$3
58-AV-322	(B)	.30	58-1-3043	(L)	3
58-AV-112	(C)	.35	58-732-51	(M)	1
58-AV-249	(D)	.65	58-AV-2974	(N)	2
58-AV-304	(E)	.75	58-AV-3258	(O)	2
58-AV-1434	(F)	4.10	58-AV-2977	(P)	3
58-AV-249	(G)	.65	58-AV-3264	(Q)	4
58-AV-4597	(H)	2.05	58-AV-3034	(R)	1
58-1-3038	(I)	2.05	58-AV-4241	(S)	1
58-1-3031	(J)	2.35	58-AV-5491	(T)	9

BALL BEARING DRIVES

These consist of a drive screw, and a ball bearing for easier ope tion. They are used with the Round Hole Punches as listed belo They reduce friction to a minimum. . . . .save time and effo Fig. B above.

Cat. No.	For Use With Punches	N
58-AV-322-BB	730 sizes 11/16" to 15/16"	$1.
58-AV-112-BB	730 sizes 1" to 1½"	1.
58-AV-249-BB	730 sizes 1-5/8" to 1-3/4"	3.
58-AV-304-BB	730 sizes 1-7/8" to 2½"	4.
58-AV-1433-BB	730 sizes 2¾" to 3"	7
58-AV-249-BB	730X sizes 1-1/8" to 1½"	3
58-AV-249-BB	730 size 1-7/32"	3
58-AV-304-BB	730M size 2-25/32"	4

MILLER WIRE STRIPPER



AND WIRE CUTTER

Gap is adjustable stripping all co monly used solid stranded wire siz Hardened and grou jaws cut wire or insulation cleanly and neatly. Soft plastic colo handles. Available with or without the spring loading featu Length 5".

Cat. 361-100 Without spring loading **Net $0.**
Cat. 361-101S With spring loading **Net $1**

ADEL NIBBLING TOOL

FOR SHEET METAL OR PLASTICS

Approved and accepted by mode kers, sheet metal workers and other the easy way to cut regular or irregu shaped openings in flat or shaped sh metal without adding strain or dist tion to the edges. The Adel Nibbl Tool will cut round, square, keyed or other shaped holes of a size over 7/16". Capacity up to 18 gauge steel (.046") maximu or up to 1/16" thick aluminum, copper or plastic sheet. The c ting punch is easily replaced when worn from frequent u

Cat. 366-NT Nibbling Tool **Net Each $4.**

Quantities of 12 or more Net Each $4.0

Cat. 366-NT-RP Replacement Punch **Net Each $2**

G-C ELECTRONICS

CEMENTS & THINNERS

For use in general Radio and TV servicing. Radio-TV Cement for repairing and cementing speaker cones. Plastic Cement for broken or cracked cabinets. Rubber Cement for cementing phono drive wheels. Acrylic-Plexiglass Cement Lucite and other materials. 2-oz. sizes have brush for application.

FOR RADIO-TV SERVICE

Cements			Thinners	
Cat.	**Net**	**Qty.**	**Cat.**	**Net**
59-30-2	**$0.65**	2-oz.	**59-28-2**	**$0.59**
59-30-4	**.89**	4-oz.	**59-28-4**	**.89**
59-30-8	**1.75**	8-oz.	....	
59-30-16	**3.00**	16-oz.	**59-28-16**	**4.95**

FOR PLASTICS

59-32-2A	**$0.65**	2-oz.	Use Type 28 Thinner Listed Above
59-32-8A	**1.85**	8-oz.	
59-32-16A	**3.00**	16-oz.	

FOR BAKELITE

59-32-2	**$0.99**	2-oz.	**59-67-2**	**$0.59**
59-32-8	**2.89**	8-oz.	....	
59-32-16	**4.78**	16-oz.	**59-67-16**	**1.79**

RUBBER TO METAL

59-35-2	**$0.65**	2-oz.	Use Type 67 Thinner Listed Above
59-35-4	**1.00**	4-oz.	
59-35-8	**1.60**	8-oz.	

ACRYLIC-PLEXIGLASS

59-40-2	**$0.60**	2-oz.	**59-29-2**	**$0.59**
59-40-8	**1.45**	8-oz.	**59-29-8**	**1.10**
....		16-oz.	**59-29-16**	**1.79**

CLEANING FLUIDS & SOLVENTS

CHLORO-KLEEN

All purpose cleaning of any electronic component. Quickly dissolves grease, dirt, oils, tar and waxes. Non-Toxic.

Cat.	Qty.	Net
59-213-4	4 oz.	**$0.85**
59-213-16	16 oz.	**1.90**

DE-OX-ID

Cleans and prevents oxidization on circuit contacts.

Cat.	Qty.	Net
59-19-1	1 oz.	**$0.70**
59-19-2	2 oz.	**1.10**
59-19-6	6 oz. Spray	**2.00**
59-19-16	16 oz.	**7.15**

SERVICE SOLVENT

Cuts and loosens all types of speaker cone cements.

Cat.	Qty.	Net
59-31-2	2 oz.	**$0.59**
59-31-4	4 oz.	**.89**
59-31-8	8 oz.	**1.10**
59-31-16	16 oz.	**1.69**

CONTACT CLEANER & LUBRICANT

Fast acting. Leaves film of protecting lubricant.

Cat.	Qty.	Net
59-210-2	2 oz.	**$0.60**
59-210-4	4 oz.	**.90**
59-210-8	8 oz.	**1.65**

NO-OX ELECTRONIC CONTACT CLEANER

A liquid, non-gumming chemical that dissolves corrosion with speed without the use of solvents. Lubricates and protects contacts long after applications.

Cat.	Qty.	Net
59-100-02	2 oz.	**$1.10**
59-100-16	16 oz.	**6.50**

LUBRICANTS

CONTROL CLEANER

Cleans and lubricates bearings in controls, switches, etc. With applicator.

Cat.	Qty.	Net
59-212-2	2 oz.	**$0.65**

OIL ASSORTMENT KIT

6 special electronic oils in handy vial dispensers. A must for Radio-TV & appliance servicemen & Electronic Engineers.

Cat. 59-9400 Kit **Net $3.50**

PHONO MOTOR GEAR LUBRICANT

Does not thin out. Stays put for long protection.

Cat.	Qty.	Net
59-122-2	2 oz.	**$0.65**

"LUBRIPLATE"

Super lubricant, grease type, protective. Reduces friction loss, prevents rust and corrosion.

Cat.	Qty.	Net
59-23-02S	2 oz. tube	**$0.75**

COLOR CODE KIT

Complete kit of brilliant fast drying lacquers, all standard 10 E.I.A. colors; includes brushes, and E.I.A. color chart. Colors are: Black, brown, red, orange, yellow, green, blue, purple, gray and white.

Cat. No. 59-677	Color Code Kit	**Net $3.00**
Cat. No. 59-29-2	2 oz. jar thinner	**Net $0.59**

COIL DOPE

Clear and fast drying. Gives protective film which locks windings in place. Type 37 may be used for welding polystyrene sheet materials together. Type 36 is for general use.

Cat.	Qty.	Type	Net
59-37-2	2 oz.	Polystyrene	**$.60**
59-37-4	4 oz.	Polystyrene	**.90**
59-41-2	2 oz.	Poly thinner	**.59**
59-36-2	2 oz.	Nitrocellulose	**.65**
59-28-2	2 oz.	Thinner	**.59**

RED GLPT INSULATING VARNISH

An alkyd base compound which dries to a glossy hard film which is moisture, oil, chemical resistant. For insulating and protecting coils, transformers, motor windings; excellent for banding gaskets, sealing adjustments, coating solder connections, etc. Heat resistant to 300°F. Brush applicator attached to cap.

Cat. No. 59-90-2	2 oz. bottle	**Net $0.63**
Cat. No. 59-90-8	8 oz. bottle	**Net $2.00**
Cat. No. 59-67-2	2 oz. bottle proper thinner	**Net .59**

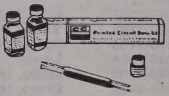
SUPER STRONG EPOX CEMENT

Provides high bond strength and exceptional adhesion to many materials which are normally difficult to cement. Does not shrink, is resistant to water, solvents, heat, cold and fungus.

Cat. No. 59-346 2 ingredients (must be mixed) **Net $1.95**

PRINTED CIRCUIT SERVICE KIT

SILICON RESIN



Here is a somewhat different selection of items used by service technicians in the repair of printed circuits as used in TV sets, radios, hearing aids, and other electronic devices. Kit contains Print-Kote Silicone Resin, Print-Kote Solvent, Pure Silver Print, Solder Probe Tool, Stainless Brush and Scraper, Special Print-Kote Solder, GC Printed Circuit Service Manual all packed in a handy box.

Cat. 59-680 Silicone Resin Printed Circ. Kit **Net $8.50**

MASTER PRINTED CIRCUIT KIT

A complete kit designed for electronic service shops for the repair of printed circuits. Includes special printed circuit soldering iron with small tip, low-melt solder, solder washers (fluxed) special printed circuit soldering probe, small tweezers, Print-Kote silicone resin spray and complete instructions for the servicing of printed circuits.

Cat. 59-683 Master Printed Circuit Kit **Net $12.95**

STANDARD PRINTED CIRCUIT KIT

Basically the same as Kit No. 683. Includes tweezers, one box each of solder wire, solder washers, foil, one solder probe tool and brush, silicone resin lacquer and solvent. Complete instructions for the repair and servicing of printed circuits. Does not include soldering iron.

Cat. 59-682 Standard Printed Circuit Repair Kit **Net $6.95**

STRIP-X ENAMEL REMOVER

A liquid chemical which quickly removes enamel. Formar, etc., from magnet wire. Just dip wire in Strip-X . . . wait 30 seconds and wipe insulation off. Particularly useful on thin or stranded wire.

Cat. 59-26-2 2-ounce bottle **Net $.85**

INDUSTRIAL USERS WRITE FOR QUANTITY PRICES

KRYLON SPRAYS

16 OZ. SPRAY DISPENSER

Handy, portable, convenient, easy to use. Always ready for instant application. Good to the very last spray. Guaranteed non-clogging valve. Provides a "professional" job every time. Just shake the can vigorously, push the button and spray.

CRYSTAL CLEAR ACRYLIC SPRAY

For Radio, Television and Electronics. Provides a hard, waterproof coating of tough Acrylic plastic. Useful in TV sets to prevent corona in high voltage section and minimize dust collection. Used on TV antennas to keep connection tight and prevent rusting and pitting. Impervious to salt sprays. 16 oz. can.

Cat. 240-1302 Clear Acrylic Spray **Net $1.32**

COLOR ENAMEL SPRAYS

Highly attractive, non-fading, enamel sprays for interior or exterior use. Goes on in seconds, dries in minutes. 16 oz. cans. Shpg. wt. each 1¼ lbs.

Cat.	Color	Cat.	Color
240-1501	Glossy white	**240-1901**	Regal blue
240-1502	Flat white	**240-2001**	Hunter green
240-1601	Glossy black	**240-2101**	Cherry red
240-1602	Flat black	**240-2201**	Bright copper
240-1603	Machine grey	**240-2301**	O.D. Khaki
240-1604	Light grey	**240-2401**	Int'n'tl orange
240-1701	Bright gold		
240-1801	Chrome yellow	Any Color Each	**Net $1.26**

GLOWING FLUORESCENT SPRAYS

Fast, easy to use in an aerosol spray can. Colors give neon effects under blacklight. Colors can be used for such things as marking car bumpers, targets, signs and posters, training aids, displays, banners and many more. Can be used on paper, wood, cloth, glass metal, some plastics and styrofoam. Dries in minutes.

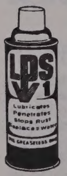
Cat.	Color	Net
240-3101	Red Orange-633, 16 oz. can.	**$1.96**
240-3102	Yellow Orange-634, 16 oz. can	**1.96**
240-3103	Sunset Gold, 16 oz. can	**1.96**
240-3104	Lemon Yellow, 16 oz. can	**1.96**
240-3105	Cerise, 16 oz. can	**1.96**
240-3106	Green, 16 oz. can	**1.96**

INDUSTRIAL SPRAYS

Cat.	Description	Net
240-1319	Metal Primer, Yellow Zinc Chromate	**$1.32**
240-1320	Metal Primer, Green Zinc Chromate	**1.32**
240-1326	Contact cleaner & lubricant, 16 oz.	**1.32**
240-1326A	Contact cleaner & lubricant, 8 oz.	**.65**
240-1317	Rust Magic Metal Primer	**1.26**
240-1325	Silicone All-Purpose Spray	**1.32**
240-1318	Gray All-Purpose Primer	**1.26**

LPS

SOFT FILM METAL PROTECTORS



For lubricating and protecting the most delicate mechanisms. LPS provides a soft protective film which will not pick up dust or dirt, penetrates deep into hard-to-reach areas to loosen existing dirt and rust and prevent formation of rust, displaces water in or on wet electrical and electronic equipment, and inhibits the formation of rust during the manufacture, storage, or shipment of metal components. Treated metal surfaces may be plated, painted, printed, welded or soldered over.

GREASELESS LPS #1

Provides a .0001 inch greaseless coating which lubricates, penetrates to loosen rust and dirt, inhibits rust, and displaces water on wet components.

OILY FILM LPS #2

Provides a .0001 inch oily film which protects metals from rust and corrosion for one year or more, provides lubrication and absorbs moisture on wet components.

HEAVY DUTY LPS #3

Provides a .0002 inch waxy film which protects metals from rust and corrosion for two years or more, provides lubrication and absorbs moisture to dry wet components.

GC SPRAYS

AEROSOL CHEMICALS FOR SERVICING

TV–RADIO–ELECTRONICS

Easy to use and convenient to store. For better control of spr direction and coverage use a G-C Gun-Type Spray Can Hanc which snaps on any aerosol can. Gives trigger control and kee hands clean.

Cat. No.	Size oz.	Description & Use Of Contents	N E
59-8666 **59-8666-16**	6 16	Spra-Kleen heavy duty electronic contact control cleaner with detergent action	**$0.** **1.**
59-8888	8	Spra-Lube cleaner-lubricant for color TV Tuners	**1.**
59-5555	8	Nuvi-Tran Tuner Cleaner for critical nuvistor and transistor circuitry	**2.**
59-8668 **59-8667**	6 16	Super Freeze Mist for locating "Intermittence" faster than ever	**1.** **2.**
59-8670-6	6	JIF all purpose cleaner & lubricant for the industrial & TV Technician	**1.**
59-8682 **59-8682-16**	6 16	Relay-Kleen superior cleaner for all elec. & mech. relays & contacts	**1.** **3.**
59-99-06 **59-99-16**	6 16	"Action" silicone-based tuner cleaner for long-lasting protection	**.** **1.**
59-50-12	16	Red-X TV Corona Dope stops corona shorts in high voltage circuits	**2.**
59-9082	16	Glass & Plastic Cleaner ammonia-based for best results	**.**
59-10-620	16	Audio-Video Magnetic Tape Head Cleaner keeps all heads in top condition	**2.**

SPRA-KOAT VARNISH & LACQUERS

Cat. 59-60-12 **Cat. 59-60-13**	13 oz. Black Ruf-Koat wrinkle varnish 13 oz. Gray Ruf-Koat wrinkle varnish	**Net E** **$2.2**
Cat. 59-84-12 **Cat. 59-85-12**	16 oz. Blue Hammer two-tone finish 16 oz. Silver Hammer two-tone finish	**Net E** **$2.**
Cat. 59-62-12 **Cat. 59-62-13**	16 oz. Telephone black lacquer 16 oz. Telephone Gray lacquer	**Net E** **$2.**

GC SPRAY GUN HANDLE

Converts any spray can to a professional spray gun. Attaches detaches in seconds. Eliminates hand fatigue.

Cat. 59-5900 Spray Can Handle **Net $0.4**

ITT INSTANT CONTACT CLEANER

Penetrates minute crevices to clean and lubricate contacts on types of switches, relays, etc. Evaporates immediately, leaves residue. It is non-explosive, non-flammable and non-toxic.

IG INSTANT COLD GALVANIZE

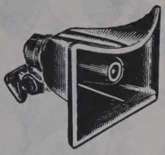
For use wherever metal is exposed to corrosive conditions durir construction, maintenance or use. LPS Instant Cold Galvanize a heres to any firm surface, even to rusty areas if loose scale is moved. Touch dries in minutes. Can be painted over in 6 hours 30 minutes baking at 350°. Single application thickness approx mately .0015 inch.

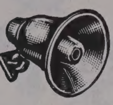
LPS Qty.	Cat. 416-LPS #1-★		Cat. 416-LPS #2-★		Cat. 416-LPS # 3-★		Cat. 416-ICC-★		Cat. 416-IG-★	
2 Oz.†	2	$0.59	....		2	$0.59	....		....	
7 Oz.†	7	.84	7	$1.01	7	1.01	7	$1.19	7	$1.1
16 Oz.†	16	1.41	16	1.65	16	1.65	16	2.25	16	2.2
Gal.	128	4.80	128	5.40	128	5.40	128	16.00	128	22.2

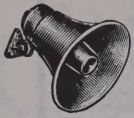
†In Aerosol Spray Cans. ★Give complete Cat. No. when orderin i. e., 416-LPS #1-2, or 416-LPS #2-2.

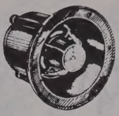
UNIVERSITY SOUND

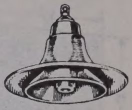
FOR INDUSTRIAL PAGING & TALKBACK


CIB-CMIL


MIL-A


IB-A


MIS

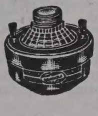

IBR

Compact reflexed horns, all with built-in driver units, for every conceivable industrial sound requirement. Corrosion proof finishes, plus rugged water proof construction afford immunity to humidity, salt spray, wind and vibration, and assure years of trouble-free service. All types provide a high degree of intelligibility which enables them to penetrate surrounding noise levels. Their high sensitivity assures out-standing performance when employed for "talk-back" purposes in intercommunication systems. No need for close talking. The 45 ohm models are for use with 40-60 ohm line intercom systems, and eliminate need for transformer.

Cat. No.	Max. Watts	V.C. Imp.	Dispersion	Range CPS	Type Mtg.	Dimensions Depth	Dimensions Dia.	Lbs. Wt.	Normally Used For	Net Price
122-IB-A4	30	4 ohms	105°	250-13,000	Wall	9"	10¼"	4½	Paging & announcing	**$28.83**
122-IB-A8	30	8 ohms	105°	250-13,000	Wall	9"	10¼"	4½	Paging & announcing	**27.17**
122-IB-A45	30	45 ohms	105°	250-13,000	Wall	9"	10¼"	4½	Paging & announcing	**28.83**
122-MIL-A4	10	4 ohms	120°	350-13,000	Wall	6-7/8"	7-13/16"	3¼	Intercommunication	**24.18**
122-MIL-A8	10	8 ohms	120°	350-13,000	Wall	6-7/8"	7-13/16"	3¼	Intercommunication	**22.91**
122-MIL-A45	10	45 ohms	120°	350-13,000	Wall	6-7/8"	7-13/16"	3¼	Intercommunication	**24.18**
122-MIS-4	7.5	4 ohms	150°	500-13,000	Panel	4-7/16"	5½"	2½	Intercom. Flush mtg.	**25.17**
122-MIS-8	7.5	8 ohms	150°	500-13,000	Panel	4-7/16"	5½"	2½	Intercom. Flush mtg.	**23.63**
122-MIS-45	7.5	45 ohms	150°	500-13,000	Panel	4-7/16"	5½"	2½	Intercom. Flush mtg.	**25.17**
122-CMIL-A4	10	4 ohms	120 x 60°	350-13,000	Wall	8½"	6¼x9½"	4	Paging & talk-back	**28.08**
122-CMIL-A8	10	8 ohms	120 x 60°	350-13,000	Wall	8½"	6¼x9½"	4	Paging & talk-back	**32.05**
122-CMIL-A45	10	45 ohms	120 x 60°	350-13,000	Wall	8½"	6¼x9½"	4	Paging & talk-back	**33.05**
122-CIB-A4	30	4 ohms	120 x 60°	250-13,000	Wall	12"	7-3/8x14"	6	Paging & talk-back	**33.05**
122-CIB-A8	30	8 ohms	120 x 60°	250-13,000	Wall	12"	7-3/8x14"	6	Paging & talk-back	**32.05**
122-CIB-A45	30	45 ohms	120 x 60°	250-13,000	Wall	12"	7-3/8x14"	6	Paging & talk-back	**33.05**
122-IBR-A8	30	8 ohms	360°	300-10,000	Ceiling	13"	10¾"	5¼	Non-dir. paging	**35.39**

ID-60

ID-40


ID-30

DRIVER UNITS

For use wherever dependable, trouble-free, high power sound projection is required. Rugged construction features dust and humidity proof die-cast housings, heavy-duty Alnico 5 "W" magnets, and precise, permanent voice coil alignment. The 16-ohm models are recommended for use where speaker lines are short, or where accessory line matching transformers are used. The transformer models for use with long speaker line, or in multiple speaker installations. The 16-ohm models have binding post terminals. The transformer models a recessed, protected screw terminal board.

16-OHM IMPEDANCE TYPES

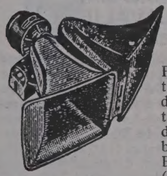
Cat. No.	Range CPS	Pwr. Watts	Case Dia.	Wt. Lbs.	Net Each
122-ID-20	120-6,500	20	3½"	3¾	**$18.18**
122-ID-30	85-7,500	30	4-1/8"	3¾	**23.05**
122-ID-40A	80-12,000	40	4½"	4-7/8	**28.00**
122-ID-60	70-12,000	60	4-11/16"	5	**40.60**

TRANSFORMER TYPES

Transformer impedances: ID-40T–45/122/250/500/1000/2000 ohms (40/20/10/5/2.5 watts); ID-60T–16/80/165/250/500/1000/2000 ohms plus 70-volt line power taps. (60/30/20/10/5/2.5 watts.)

122-ID-40T	80-12,000	40	5"	6¼	**$39.20**
122-ID-60T	70-12,000	60	6¾"	6¾	**52.92**

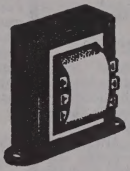
Note. Low frequency limit based on capability of driver unit. If horn cut-off is higher than rated low frequency limit of driver, horn will be determining factor.



WIDE ANGLE

For covering areas where width is greater than length. Two identical one-piece die-cast aluminum units form an integrated wide-angle trumpet powered by one driver unit. Low cutoff 200 cps. Distribution 120° horizontally, 60° vertically. Bell mouth size 18½" x 9¼". Depth (less driver) 10¼". Wt. 10¼ lbs. Uses any University driver unit.

Cat. 122-Cobreflex Less Driver Net **$31.73**



LINE TRANSFORMERS

15-WATT CAPACITY

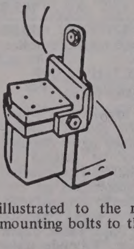
For use with paging speakers. Matches 4/8/16 ohm voice coils. Primary taps for 45/325/500/1000/2000/4000/8000 ohms and 70-v. line power taps for 15/10/5/2.5/1.25/.65 watts. Mtg. holes on 2" ctrs. Wt. ½ lb.

Cat. 122-5434 Each Net **$5.60**

30-WATT CAPACITY

For use with ID-20 or ID-30 driver units, or paging speakers. Matches 4/8/16 ohm voice coils. Primary taps for 45/165/200/250/500/1000/2000 ohms and 70 volt line power taps for 30/25/20/10/5/2.5 watts. Mtg. holes on 2-3/8" ctrs. Wt. 1 lb.

Cat. 122-5433 Each Net **$7.80**

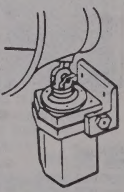


JUNCTION HOUSING

Die-cast aluminum with gland nut cable entrance and exit. Provides weather-proof housing for transformers listed above. May be mounted on wall, or to trumpet. "U" bracket. Max. inside size 2-3/8"x 2-7/8" x 2-7/8"

Cat. 122-CTR Each Net **$7.26**

The CTR Housing may also be used to mount the University Paging Speakers as illustrated to the right. The Paging Speaker mounting bolts to the top of the CTR Housing.



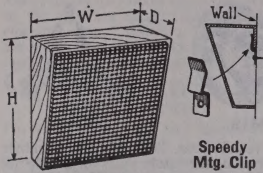
PB-1 HOUSING

A new, water shedding and splashproof transformer housing for Paging type MIL, CMIL, IB and CIB speakers. Bolts to the top of the speaker as shown to the left. Houses a type 5434 line matching transformer.

Cat. 122-PB-1 Wt. 1 lb. Net **$3.74**

ARGOS

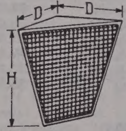
ARGOS SPEAKER BAFFLES



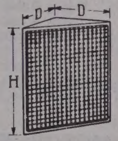
REGULAR WALL BAFFLES

The standard baffle for use wherever high humidity or temperature is encountered. Heavy wood-grained pyroxylin covering provides a lasting beauty, is scuff-resistant, paintable and washable. Front grilles are tough, durable plastic. Each baffle furnished with Speedy Mounting Clips and speaker mounting hardware. 8"/10"/12" baffles have hole (under plastic covering) for L-pad. †Front slopes at 16° from vertical. ‡Max. speaker depth usable. *Blonde at same price.

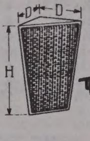
Walnut*	—For Spkr.—		— Baffle Size——————			Shpg.	Net
Cat. No.	Size	Depth‡	H.	W.	D.†	Lbs.	Each
390-WB-4/5D	4"/5"	2¾"	6-1/8"	6¼"	4"	1-3/8	$3.98
390-WB-6D	6"	3-3/8"	8½"	7-7/8"	5"	2¼	4.65
390-WB-8D	8"	4-3/8"	10½"	9¾"	6½"	3-1/8	5.18
390-WB-6/9D	6"x9"	4-3/8"	10½"	9¾"	6½"	3-1/8	5.25
390-WB-10D	10"	5¼"	12-3/8"	11-7/8"	7¾"	4	7.27
390-WB-12D	12"	6-3/8"	14"	13-5/8"	9-1/8"	5½	7.43



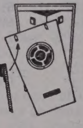
SCB



CB



SCB-208S



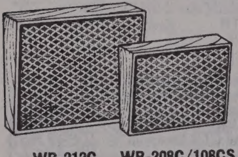
Detail

HIGH EFFICIENCY CORNER BAFFLES

Designed to cut installation and service time. "Clip-In" front goes on or off in 9 seconds. Slotted backs hang on Speedy Mounting Clips as easily as wall baffles. Bass-relex design with acoustic padding. Sturdy construction with wood-grained pyroxylin plastic covering. Tough, attractive plastic grille fronts. SCB Series has slanted front for downward projection. CB Series often used horizontally between ceiling and wall, or between ceiling and beams. ‡Max. inside depth for speaker. *Blonde models available at same prices.

Walnut*	—For Spkr.—		——Baffle Size———			Shpg.	Net
Cat. No.	Size	Depth‡	H.	D.	Width	Lbs.	Each
390-SCB-8D	8"	5½"	15"	13"	17¾"	6	$11.23
390-SCB-12D	12"	6-1/8"	20"	15"	20¾"	8	14.95
390-CB-8D	8"	4½"	14"	9¼"	12¼"	4½	9.38
390-CB-12D	12"	6¼"	20"	13"	17¾"	8½	14.50
390-SCB-208S	...	...	18"	9½"	12½"	5½	15.95

With built-in Jensen 8", 15-watt, 8-ohm ceramic magnet speaker.



NEW THIN-LINE BAFFLES

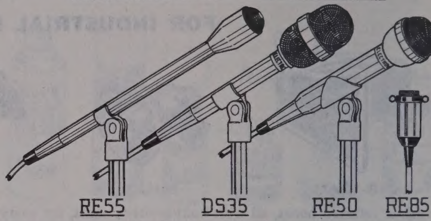
For P-A installations where appearance counts. Heavy wood grained pyroxylin covering may be painted or washed. Baffles with speakers/L-pads/transformers are furnished wired to terminal strip. Furnished with Speedy Mounting Clips. ‡Max. depth for speaker. *Blonde units same prices.

Walnut*	—For Spkr.—		—— Baffle Size———			Shpg.	Net
Cat. No.	Size	Depth‡	H.	D.	Width	Lbs.	Each
390-WB-208C	8"	3"	9½"	4½"	12"	2	$5.18
390-WB-212C	12"	4-5/8"	13¾"	6¼"	16"	4	7.43

BAFFLES WITH JENSEN SPEAKERS

390-WB-108CS	With 8", 6-watt, 8-ohm speaker	$9.35
390-WB-408CS	With 8", 10-watt, 8-ohm speaker	11.75
390-WB-408CSL	Same, with L-Pad control	13.50
390-WB-408CST	Same, with 70.7-v. line transf.	15.25
390-WB-408CSLT	Same, with L-Pad & line transf.	16.50
390-WB-212CS	With 12", 15-watt, 8-ohm speaker	16.75
390-WB-212CSL	Same, with L-Pad control	18.95
390-WB-212CST	Same, with 70.7-v. line transf.	19.98
390-WB-212CSLT	Same, with L-Pad & line transf.	21.95

ELECTRO-VOICE



OMNIDIRECTIONAL RE55

Smooth, peak free wide-range response combined with functiona styling makes this the most versatile professional quality omn directional dynamic microphone ever offered for recording sym phonic orchestras, close instrument miking, hand held for audienc participation and interview use, and on-the-spot news coverag Frequency response 40 to 20,000 Hz. Lo-Z impedance. Outpu level -55db. Finish fawn beigh Micomatte. With shielded cable an mounting clamp.

Cat. 46-RE55 Omnidirectional Microphone **Net $149.4**

CARDIOID DYNAMIC DS35

For exacting performing and recording applications. Emphasize low frequencies when used close up, sound preferred by man entertainers. "Volumetric" hologram-developed foam diaphrag provides exceptionally wide-linear response. Unique new ported ai damped head greatly reduces pickup of shock and cable noise Highly effective built-in pop filter. Rugged steel case. Non-reflec ing fawn beige Micomatte finish. Cable and mounting clip furnis ed. Response 60 to 17,000 Hz. Lo-Z impedance. Output -58 d

Cat. 46-DS35 Cardioid Microphone **Net $81.0**

NOISELESS RE50

For hand and stand use in recording vocals, interviewing, instru mental broadcast, and recording. Extremely low susceptibility t mechanical shock, handling and cord noise, and breath pops due t unique double case design separated by rubber isolation mountin Cable and mounting clamp furnished. Response 80 to 13,000 H Impedance Lo-Z.

Cat. 46-RE50 Output -55 dB **Net $77.1**

LAVALIER RE85

Extremely free of noise due to friction and shock. Internal elemen suspended in complaint rubber. Hard, smooth case. Extremely fla response of 90 to 10,000 Hz in chest position. Omnidirection pick-up pattern. Lo-Z impedance. Output -61 dB. Complete wit 30 foot shielded cable, neck cord assembly, tie clamp assembl belt clip, and zipper pouch. Length 2-5/8", diameter 15/16".

Cat. 46-RE85 Quiet Lavalier Microphone **Net $85.5**

TURNER

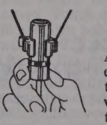
ZONE PAGING MICROPHONE

For use in inter-communications and paging systems where it is necessary to call into electronically separated areas. The microphone is a 200 ohm dynamic. The base has six SP-DT, 3-position, center-off rocker type push-to-talk switches which permit use into eleven areas plus all-call. There is no cable or interior wiring, thus permitting the installer to wire the unit to suit any installation. Th base also houses a center mounted busy light.

Cat. 277-MP-756 Zone Paging Microphone **Net $36.0**

TURNER "MINI-MIKE" 35 SERIES LAVALIERS

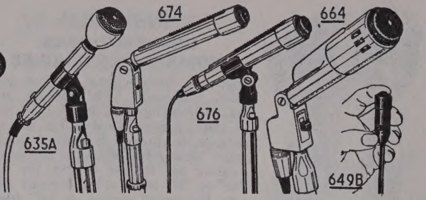
MODEL 35



A new, very small dynamic microphone designe especially for lavalier applications, including tailored response over the entire speech rang with no discrimination or distortion. Omni-direc tional pickup pattern. High-low impedance com bination. Frequency response 50-12,000 Hz. Out put level: high impedance -60 db; low impedance (150 ohm) -50 db Overall size 3/4" diameter x 3" long. Weight 41 grams less cable Desert gold finish with chrome grille. Complete with 25 foot, conductor shielded cable, lavalier cord and clothing clip.

Cat. 277-35 Lavalier Dynamic Microphone **Net $42.0**

ELECTRO-VOICE MICROPHONES



SUPER CARDIOID RE-15

For exacting professional applications. Super-cardioid directional pattern provides maximum rejection at 150° off axis, maintains essential cardioid pattern at other positions. Response 80 to 15,000 cps, with bass tilt switch. Output -56 db @ 150 ohms. Matte-satin finished steel case 6-7/8" long x 1-3/8" dia. With 310 clamp. 18 ft. 2-cond. shielded cable and Cannon XL-3-12 connector. Net wt., less cable, 8 oz.

Cat. 46-RE-15 Impedance 150 ohms **Net $169.80**

CARDIOID RE-10

Similar in design and construction to RE-15, but for applications with slightly less rigid performance tolerances. Response 80 to 13,000 Hz. Output -55 db at 150 ohms impedance.

Cat. 46-RE-10 Cardioid Microphone **Net $99.60**

CARDIOID RE-11

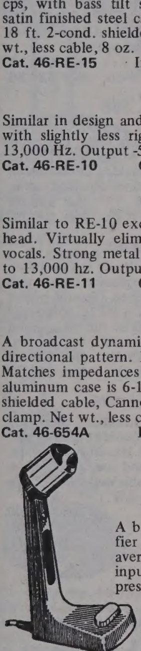
Similar to RE-10 except with integral blast and pop filter around head. Virtually eliminates breath noises when used for close-up vocals. Strong metal protective screen around filter. Response 80 to 13,000 hz. Output -55 db at 150 ohms impedance.

Cat. 46-RE-11 Cardioid Microphone **Net $106.50**

SLIM TRIM 654A

A broadcast dynamic for stand, hand-held or lavalier use. Omnidirectional pattern. Response 50 to 15,000 cps. Output -57 db. Matches impedances 50 thru 250 ohms. Grey finished extruded aluminum case is 6-15/16" long x 1-1/8" dia. With 18 ft. 3-cond. shielded cable, Cannon XL-3-12 connector, lavalier cord and .310 clamp. Net wt., less cable, 7 oz.

Cat. 46-654A Impedance 50-250 ohms **Net $72.00**



COMMUNICATIONS 619TR
DYNAMIC TRANSISTORIZED COMPRESSOR MICROPHONE

A base-station microphone with transistor amplifier and speech compressor. Provides high value of average modulation. Use with any impedance or input level. Controls for level and degree of compression. Grip-to-talk switch in stand riser, compression meter in base. Switch operates mike and relay. Response 150 to 10,000 Hz. Output (at compression threshold): Hi-Z -42db; 3000 ohm -44 db; 150 ohm -58 db; (maximum output -40 db). Coiled cord cable extends to 5 ft. Overall size 4-1/2" x 4-3/4" x 9-3/4" high. Net wt. 2 lbs.

Cat. 46-619TR Transistorized Microphone **Net $51.00**

PAGING MODEL 619

For paging and two-way communications. Similar to Model 619TR but less transistor amplifier and compressor. Press-to-talk switch is usable in base or riser, allows relay operation. Response 70 to 10,000 Hz. Output -57 db. Specify Hi-Z or Lo-Z.

Cat. 46-619 Dynamic Microphone **Net $35.70**

COMMUNICATIONS 714

A ceramic, hand-held microphone for paging, amateur radio, and CB uses. Cycolac case for long life and protection from shock. Frequency response of 100 to 7,000 Hz tailored for high intelligibility. DP-DT, press-to-talk switch for both mike and relay control. Overall size 2-1/2" wide x 3-5/8" high x 1-7/16" deep. Output -55 db. Coiled cord extends to 5 feet.

Cat. 46-714 Communications Ceramic **Net $12.00**

CLOSE TALKING 717

Similar to Model 714 except cardioid pickup pattern. Aperture on either side of diaphragm provides attenuation of sound arriving from rear and sides. Response 100 to 7,000 Hz. Output -55 db.

Cat. 46-717 Cardioid Ceramic **Net $14.10**

BROADCAST DYNAMIC 635A

For professional uses such as film production, recording, FM, AM and TV broadcasting, etc. Omnidirectional pickup pattern. Response 100 to 13,000 cps rising. Output -55 db. Withstands high humidity and temperature extremes, corrosive atmospheres, and mechanical shock. Steel case with non-reflecting matte satin-nickel finish. Length 5-15/16", dia. 1-13/32". With 18 ft. 2-cond. shielded cable, Cannon XL-3-12 connector, lavalier cord and 310 clamp. Net wt., less cable, 6 oz.

Cat. 46-635A Impedance 150 ohms **Net $56.70**

DYNAMIC CARDIOID 674

A general purpose cardioid for P-A, recording, communications, etc. Symmetrical cardioid pattern. Response 60 to 15,000 cps. 3-position switch offers controlled low-frequency attenuation to overcome rumble and feedback when used at a distance. Dual Hi/150 ohm impedance with internal changeover. Output -57 db. Pressure-cast zinc alloy case with satin-chrome finish, on/off switch and 5/8"-27 threads for stand. With 16 ft. 2-cond. shielded cable and 91-MC4M connector. Wt. 14 oz. less cable.

Cat. 46-674 Impedance Hi-Z/150 ohms **Net $61.35**

DYNAMIC CARDIOID 676

Same as Model 674 but for hand-held or stand use. Case size 7-3/8" long x 1-1/4" dia. 15 ft. cable.

Cat. 46-676 Impedance Hi-Z/150 ohms **Net $61.35**

DYNAMIC CARDIOID 664

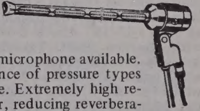
For quality recording, communications and P-A use. Permits close talking without "booming" or bass accentuation. Blast filter eliminates wind effect. Response 60 to 15,000 cps. Choice of Hi-Z or 150 ohm impedance. With On/Off switch and 5/8"-27 threaded for floor stand. Case pressure-cast zinc with stain-chrome finish. Size, 7-3/16" long x 1-7/8" dia. With 15 ft. 2-cond. shielded cable. Net wt. 1 lb., 2 oz. (less cable).

Cat. 46-664 Impedance Hi-Z/150 ohms **Net $57.00**

MINIATURE LAVALIER 649B

A small dynamic for lavalier or hand-held use in audience participation, interviews, panel shows, etc., where the microphone must be hidden and hands left free. Gray-finish lathe-turned aluminum case only 2¼" long x ¾" dia. Omnidirectional pattern. Response 70 to 10,000 cps (rising). Output -61 db. Output impedance matches 50 thru 250 ohms. With 30 ft. 2-cond. shielded cable, neck cord, belt clip and 310 stand adapter.

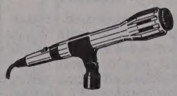
Cat. 46-649B Lavalier Mike. Wt. 31 grams **Net $73.50**



644 SOUND SPOT

A combination cardioid and distributed front opening instrument, making it the most directional P.A. microphone available. Better than 2½ times working distance of pressure types with virtually no change in response. Extremely high rejection of noise from sides and rear, reducing reverberation and feedback. Narrow front angle of acceptance for best isolation. Very low response to wind noise and shock. Response smooth from 40-10,000 Hz. Output -53db. Dual Lo-Z and Hi-Z selected by moving one wire in cable connector. High pressure die-cast zinc case, stain chrome finish. ¾" dia. aluminum tube. Head dia. 2-5/16", length 16", Cable 15'. Wt. 21 lbs. 9 oz.

Cat. 46-644 Highly directional cardioid **Net $82.20**

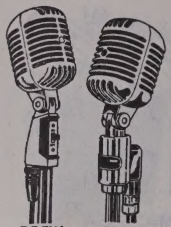


ENTERTAINER 670
CARDIOID DYNAMIC

For hand or stand use. Provides bass boost when used close up. Built-in superior pop filter. Very high degree of cancellation of sounds from sides and rear plus extremely smooth and flat response to reduce feed-back and allow increased gain from sound system. Resistant to shock noises, damage from hardest use. Selectable high or low impedance. Frequency response 60 to 14,000 Hz. Output -58 db. Lightweight, with anodized brass finish. Overall size 7-1/2" long. max. dia. 1-3/8", shank dia. 1". Net weight 6 oz. Complete with on/off switch, Switchcraft A3M connector, shielded cable, and Model 300 stand clamp.

Cat. 46-670 Entertainer's Dynamic **Net $45.90**

SHURE MICROPHONES



UNIDYNE II
UNIDIRECTIONAL DYNAMIC MICROPHONES

Cardioid, unidirectional pattern provides wide-angle front pickup, and maximum rejection of pickup from rear or sides. Rugged construction and resistance to breath and wind noises make these mikes ideal for indoor or outdoor use. Built-in selector for "L" "M" or "H" impedances. Die-cast zinc case has swivel mount, is 7¾" high, 2-3/16" wide, 3-1/16" deep. Threaded for 5/8"-27 mike stands.

STANDARD 55S

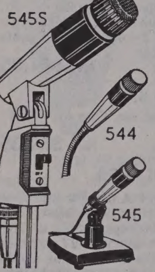
Response 50-15,000 Hz. Output: "L" (30-50Ω) -55.5 db; "M" (150-250Ω) -56.5 db; "H" (Hi-Z) -55.5 db. Equipped with Amphenol MC3M type connector and 18 ft. 2-conductor shielded cable.

Cat. 24-55S	Less switch, shpg. wt. 3-1/8 lbs.	**Net $57.00**
Cat. 24-55SW	With switch, shpg. wt. 3-1/8 lbs.	**Net $58.80**

CUSHIONED 556S

With live-rubber shock mounting. Response 40-15,000 Hz. Output: "L" (30-50Ω) -56.5 db; "M" (150-250Ω) -57.5 db; "H" (Hi-Z) -56 db. With Cannon XL3-11 type connector and 20 ft. 2-cond. cable.

Cat. 24-556S	Shpg. wt. 3½ lbs.	**Net $93.00**

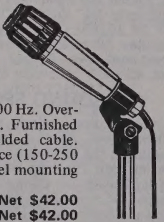


UNIDYNE III
UNIDIRECTIONAL DYNAMIC MICROPHONES

A favorite for public address systems, orchestra and music pickup. The cardioid, unidirectional pattern provides a wide-angle front pickup, with maximum rejection of sounds from sides or rear. Available for use on stands or handheld as illustrated at the left. Frequency response 50-15,000 Hz. Dual impedance permits choice of low (50-250Ω) or Hi-Z operation. Output: low imp. -57 db; high imp. -55 db. Model 545 size 1-15/16" dia., 5-13/16" long. Model 544 has 7-ft. 2-cond. cable attached. Models 545 and 545S have MC4M connector and 3-con. cable.

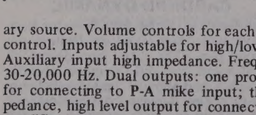
Cat. 24-545S	With switch. 18 ft. shldd. cable	**Net $61.20**
Cat. 24-545	With swivel. Less stand	**Net $57.60**
Cat. 24-544	Mike only, 7 ft. 2-C shldd. cable	**Net $54.60**
Cat. 24-544-G6	544 with 6" flex. gooseneck	**Net $56.40**
Cat. 24-544-G12	544 with 12" flex. gooseneck	**Net $57.00**
Cat. 24-544-G18	544 with 18" flex. gooseneck	**Net $57.60**
Cat. 24-S33B	Desk stand only	**Net $10.50**

UNIDYNE A
UNIDIRECTIONAL DYNAMIC MICROPHONE



Cardioid pickup pattern. For use with public address systems when feedback is a problem. Frequency response 50-12,000 Hz. Overall size 1-13/16" dia. x 6-41/64" long. Furnished with attached 15-ft. 1-condcutor shielded cable. Available in hi-impedance or low impedance (150-250 ohm) types. Equipped with slide-in swivel mounting which fits 5/8"-27 mike stands.

Cat. 24-580SA	Hi-Z, -56.5 db output	**Net $42.00**
Cat. 24-580SB	Lo-Z, 57.0 db output	**Net $42.00**



MICROPHONE MIXER

A transistorized mixer-preamplifier with inputs for 4 mikes and 1 auxiliary source. Volume controls for each input, plus an overall master control. Inputs adjustable for high/low impedance dynamic mikes. Auxiliary input high impedance. Frequency response ±2 db from 30-20,000 Hz. Dual outputs: one provides high or low impedance for connecting to P-A mike input; the other provides a high impedance, high level output for connecting to tape recorders, power amplifiers, etc., requiring 0.5 to 2.0 volts. Overall size (HWD) 2-5/8" x 11-5/16" x 5-3/16". Operates from 115 v-ac 60 Hz or auxiliary A68B Battery Power Supply using U20 (30-v) battery.

Cat. 24-M68	Mixer-Preamplifier	**Net $84.00**
Cat. 24-A68B	Aux. Batt. Pwr. Supply, less batt.	**Net $7.50**

SPHERICAL DYNAMIC MICROPHONES
OMNIDIRECTIONAL MODEL 533

Used for voice and music reproduction by entertainers, inte viewers, singers and rock 'n roll groups. Response 40-11,000 H Overall size 2-1/16" dia. x 6-19/32" long. Model 533SA has MC1 connector and 15-ft. 1-conductor shielded cable. Model 533SB ha MC2M connector and 15-ft. 2-conductor shielded cable.

Cat. 24-533SA	Hi-Z Imp., output -55.0 db	**Net $34.2**
Cat. 24-533SB	150-250 ohms, output -55.5 db	**Net $34.2**

UNIDIRECTIONAL MODEL 585

For use where poor acoustics present problems. Special filters pr vide protection against explosive breath noises and wind. Respon 50-12,000 Hz. Overall size 2-1/16" dia. x 6¾" long. Model 585S has MC1F connector and 15-ft. 1-conductor shielded cable. Mod 585SB has MC2M connector and 15-ft. 2-conductor shielded cabl

Cat. 24-585SA	Hi-Z Imp., output -56.5 db	**Net $45.0**
Cat. 24-585SB	150-250 ohms, output -57.0 db	**Net $45.0**

CARDIOID MODEL 588S

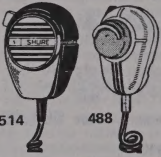
For stand or hand use in P-A systems where feedback is a problen Response 80-13,000 Hz. Built-in filters for explosive breath an wind noises. Has on/off switch with on lock-plate. Chrome plate case and steel screen. Furnished with Cannon XLR-3-11C connect and 18 ft. (Hi-Z 1 cond., Lo-Z 2 cond.) shielded rubber covere cable. Maximum diameter 2-1/8", length 6-1/2". Wt. 12 o

Cat. 24-588SA	High impedance, output -59 db	**Net $39.0**
Cat. 24-588SB	25-200 ohms, output -81.5 db	**Net $39.0**

NEW VOCAL SPHERE MODEL 579

For super-natural and intelligible voice reproduction, especial when close-talking as in stage productions. Omnidirectional pa tern. Peak-free, wide range response 50-15,000 Hz. Output -80 d Furnished with swivel adapter for stand or hand use, and Cannc XLR-311C connector with 20 ft. 2 conductor shielded cable. Ove all size: head 1-9/16" dia.; stem 3/4"; length 6-3/8".

Cat. 24-579SB	Net weight only 5½ oz.	**Net $45.0**



NOISE-CANCELLING MODEL 488

For indoor or outdoor use where the bac ground noise is high, such as when broa casting sports events. Units are compa for hand-held use and have a respon tailored for best speech intelligibilit Built-in, press-to-talk switch. 5-1/2 f coiled cord has shielded microphone lead, and separate conducto for relay control.

Cat. 24-488A	Hi-Z, response 200-4000 Hz, -17 db	**Net $38.4**
Cat. 24-488B	150-250 ohms, 200-4000 Hz, -37 db	**Net $38.4**

PAGING DYNAMIC MODEL 514B

Wide range, high fidelity response (100-10,000 Hz) cuts throug normal background noises in stores, restaurants, travel terminal hospitals, etc. Grip-to-talk switch (SP-DT) with 5-1/2 ft. 4-co ductor (2 shielded) coiled cord. Overall size 2-7/8" x 2-1/16" 1-9/16". Weight 6 oz.

Cat. 24-514B	25-200 ohms, output -77.5 db	**Net $27.0**

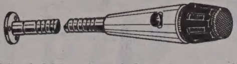
TRANSISTORIZED MODELS

Used to replace carbon microphones for increased intelligibilit and efficiency. Built-in transistorized amplifier brings output up t carbon mike level. Modes 488C and are close talking, noise ca celling.

Cat. No.	Amplifier Output	Response Hz	Supply Volts	Ne Eac
24-488C	-7 db @ 500 ohms	200-4,000	6 v-dc	**$42.6**

SHURE

NEW MODEL 515SB
UNIDIRECTIONAL DYNAMIC PAGING MICROPHONE



Wide frequency response (80-13,000 Hz) and directional cardiod pickup pattern make the 515 outstanding for paging in locations where the background noise is in the lower tone register. Shock mounted on 18" goose-neck with mounting flange. Built-in non-locking press-to-talk on/off switch. Chrome plated case and screen, with black "Armo-Dur" grille. Complete with 51" 4-conductor (2 shielded) plastic jacketed cable. Overall length, including the gooseneck, 25", max. dia. 1-15/32". Wt. 2-1/4 lbs.

Cat. 24-515SB-G18	25-200 ohms, output -81 db	**Net $31.80**

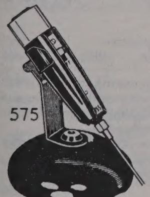
DISPATCHER
FOR PAGING & COMMUNICATIONS

A favorite with dispatchers for base-station use in Police, Fire, Utility, Forestry and Transportation Services, as well as paging and call systems. Combines a controlled magnetic microphone, grip-to-talk, slide-to-lock switch and desk stand. Pickup pattern is omnidirectional. Frequency response 100-9,000 Hz. Hi-Z tubes have Amphenol type MC3M type plug and 7-ft. 2-con. shielded cable. Low impedance types Amphenol MC4M plug and 7-ft. 4-con. shielded cable. Overall height 9-3/8", base 5" x 7". Shpg. wt. 5 lbs.

Cat. 24-520SL	Hi-Z, output -52.5 db	**Net $30.60**
Cat. 24-520SLB	150-250 ohms, output -51 db	**Net $33.60**

Model 520 microphones below are the same as used on the grip-to-talk stands above. Hi-Z types have 7-ft. 1-conductor shielded cable. Lo-Z type 7-ft. 2-conductor shielded cable.

Cat. 24-520	Hi-Z Imp., 100-9K Hz, -52.5 db	**Net $15.60**
Cat. 24-520B	150-250 Ω, 100-9K Hz, -51 db	**Net $15.60**



VERSADYNE 575
LOW COST DYNAMIC

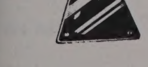
For general public address, home recording, and paging systems where both economy and performance are important. Choice of high or low impedance models, each complete with a locking, slide to talk switch, a slide-in stand adapter and a lavalier cord. Small size (1-3/32" dia. x 4-3/4" long) and lightweight (5 oz.) make the 575 easily adapted to hand, stand or lavalier use. Omnidirectional pattern. Response 40-15,000 Hz. Furnished with 1 or two conductor shielded 7 ft. cable. Less stand. Shpg. wt. 1 lb. 1 oz.

Cat. 24-575S	Hi-Z imp., output -56 db	**Net $16.50**
Cat. 24-575SB	150-250 ohms, output -56 db	**Net $15.00**
Cat. 24-S38B	Accessory desk stand	**Net $3.00**

LOW COST MODEL 515
UNIDYNE MICROPHONE

Incorporates the feedback suppression and uniform, symmetrical pick-up pattern features that have made Unidynes world famous. An excellent choice where budget is the prime consideration. For hand or stand use, includes an A25B swivel adapter. Frequency response 80 to 13,000 Hz. Output: high impedance -58 db; low impedance (25-200 ohms) -59 db. Chrome finished case.

Cat. 24-515SA	Hi-Imp., 15 ft. 1-cond. cable	**Net $27.00**
Cat. 24-515SB	Lo-Z, 15 ft. 2-cond. cable	**Net $27.00**



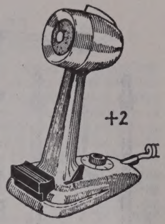
TURNER CASSETTE
REPLACEMENT MICROPHONES

For use with cassette tape recorders. Dynamic quality, wide range response. On-off switch starts and stops recorder. Lavalier cord and desk stand included. Split mini-plugs, no spacing problem.

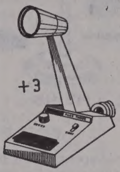
Cat. 277-2811	Hi-Impedance	**Net**
Cat. 277-2812	Lo-Impedance	**$12.00**

TURNER

TRANSISTORIZED MICROPHONES
FOR COMMUNICATIONS



Base station microphones in rugged, die-cast cases, with ceramic interiors, and incorporating a two-stage, silicon transistor pre-amplifier with 9-volt battery in the base. A volume control provides for optimum output adjustment.



MODEL +2

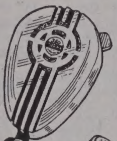
Voltage gain adjustable 0 to 35 db. Output level -23 db. Frequency response 300-3500 Hz for maximum "talk-power". Relay or electronic switching accomplished by a touch-to-talk bar and a slide switch. Complete with 3-conductor (1 shielded) coiled cord. Shpg. weight 3 lbs. Light blue color.

Cat. 277-+2	Microphone	**Net $36.00**

MODEL +3

Similar to Model +2 but incorporating a compression amplifier circuit to guard against over modulation. Voltage gain adjustable 0 to 33 db. Output level -23 db. Frequency response 300-3000 Hz. Touch-to-talk bar and slide-lock switch for relay or electronic transmission. With 3-conductor (1 shielded) coil cord. Gray hammerton finish. Shipping wt. 4 lbs.

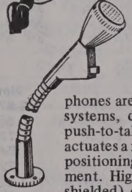
Cat. 277-+3	Compression Microphone	**Net $45.00**



350C HAND HELD
CERAMIC MICROPHONE

Features a "climate proof" ceramic cartridge in a tough cycolac case with press-to-talk on/off switch. Response 80-7000 Hz. Output -54 db. Complete with dash hanger mount, hanger button and 5-ft. coiled cord.

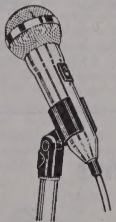
Cat. 277-350C	Mobile Mike	**Net $10.80**



TURNER FIXED MOUNT
PAGING MICROPHONES
PUSH-TO-TALK SWITCH

Designed for fixed mounting on desks, telephone switchboards, etc., these microphones are ideally suited for paging systems, grocery call systems, dispatching, etc. Die-cast housing contains a push-to-talk switch which shorts the microphone and actuates a relay. The 16-inch, flexible goose-neck permits positioning, has mounting flange for permanent attachment. High impedance types have 4-ft. 3-conductor (1 shielded) cable, 150 ohm dynamic type has 4-ft. 4-conductor (2 shielded) cable.

Cat. No.	Mike Type	Out-put	CPS Response	Ohms Imp.	Net Each
277-SR585D	Dynamic	-58 db	50-12,000	Hi-Z	$30.00
277-SR585D	Dynamic	-58 db	50- 12,000	150	30.00



CARDIOID
DIRECTIONAL MICROPHONES

Dynamic microphones for voice and music reproduction in public address, recording, and combo use. Wide angle front pickup with maximum rejection from sides and rear. Spheroid model has on/off switch, dual impedance, and is furnished with stand adapter and 20-ft. shielded cable. Output: 150 ohms -56 db; Hi-Z -55 db. Model 600 has on/off switch, is furnished with an adapter and 12-ft. shielded cable. Available in Hi-Z or Lo-Z models. Outputs: Hi-Z -55 db; Lo-Z -56 db.

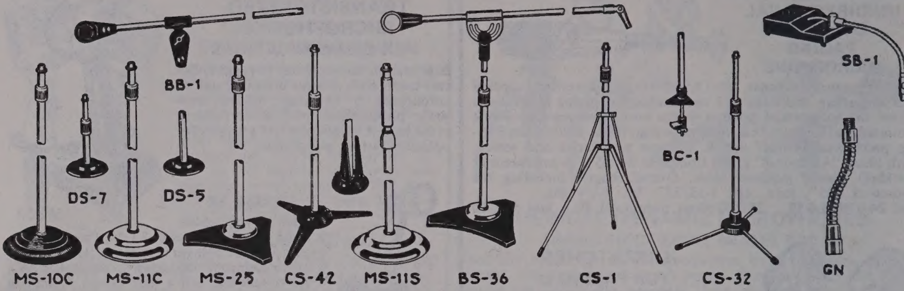
Cat.	Description	Each
277-700	Spherical, Dual Imp., 40-15,000 Hz	$57.00
277-701	Spherical, Hi-Z Only, 40-15,000 Hz	42.00
277-600	Hi-Z Imp. Only, Response 50-15,000 Hz	42.00

BALL CARDIOID MODEL 866

A dynamic microphone for high volume sounds of today's musical groups. Response 100-13,000 Hz. Built-in "pop" and wind filters. Chrome plated ball screen with black handle. Furnished with stand adapter, attached 20 ft. cable with phone plug for direct plug-in to any guitar amplifier. No on/off switch.

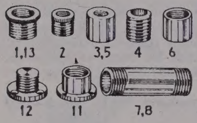
Cat. 277-866	Ball Cardioid	**Net $24.00**

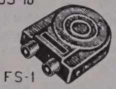
ATLAS MICROPHONE STANDS



FOR EVERY SOUND INSTALLATION

All vertical tubes Super-Chrome plated and polished for smooth action. “Velvet Action” clutches use wear proof bakelite collet for positive gripping without jamming or slipping. †Automatic “Sleeve A tion” clutches operate with slight downward pressure, cannot slip. All bases have self-leveling, shoc absorbing base pads, plus 3 additional anti-trip points. Stems terminate in 5/8”-27 threads at mike en





FLOOR STANDS

*Diameter at floor contact points. †Equipped with automatic “Sleeve Action” clutch. §Grey and chrome.

Cat. No.	Base Dia.	Height Adj.	Lbs. Wt.	Net Each
81-MS-10C	10” Grey	35” to 64”	10	**$8.90**
81-MS-12C	10” Grey	35” to 65”	12	**9.50**
81-MS-11C	10” Chrome	35” to 65”	13	**11.60**
81-MS-4	10” Grey	26” to 61”	11	**14.40**
81-MS-20	12” Grey	37” to 66”	15	**15.00**
81-MS-25	17” Grey*	37” to 66”	22	**25.50**
81-MS-11S	10” Chrome	35” to 65”†	13	**21.90**
81-MS-12S	10” Grey	35” to 65”†	12	**20.10**
81-CS-1A	Collapsible	23” to 62”	5	**18.90**
81-CS-42	16” Grey*	34” to 62”	9	**12.45**
81-CS-32	3-Legs	36” to 64”	5	**11.55**
81-CS-33	3-Legs	26” to 64”	4	**13.65**

DESK STANDS

‡ Molded phenolic base. §Streamlined grey an chrome with rear cable exit.

Cat. No.	Base Dia.	Stem Height	Lbs. Wt.	Ne Eac
81-DS-4	4” Beige‡	4” fixed	.5	**$2.1**
81-DS-5	6” Grey	4” fixed	2	**3.1**
81-DS-7	6” Grey	8” to 13”	3	**5.1**
81-DS-10	Oval Grey §	4” fixed	1.5	**5.7**

SWITCHBOARD STAND

For dispatcher or paging systems. Heavy 9” x 6½ (13 lb.) base rear-loaded to prevent tipping. 12 goose-neck has spring-loaded swivel.

Cat. 81-SB-1 Grey Finish **Net $15.1**

MIKE STAND ADAPTERS

Cat.	Description	Net
81-AD-1	5/8”-27 female to ½” pipe thd. (RCA)	**$.87**
81-AD-2	1/8” pipe thd. female to 5/8”-27 male	**.66**
81-AD-3	1/8” pipe thd. female to 5/8”-27 female	**.72**
81-AD-4	¾” long 5/8”-27 male running thread	**.54**
81-AD-5	5/8”-27 female to 5/8”-27 female coupling	**.72**
81-AD-6	7/8”-27 female to 7/8”-27 female coupling	**1.29**
81-AD-7	3” long tube, 5/8”-27 male thd. each end	**.87**
81-AD-8	6” long tube, 5/8”-27 male thd. each end	**.87**
81-AD-11	Flange, 5/8”-27 female thd., base dia. 1¼”	**.93**
81-AD-12	Flange, 5/8”-27 male, base holes 7/8” ctrs.	**.96**
81-AD-13	7/8”-27 male to 5/8”-27 female	**.96**
81-AD-14	Rt. angle tube, 5/8”-27 male/female each end	**1.47**
81-GN-6	6” flexible gooseneck, 5/8”-27 threads	**1.77**
81-GN-13	13” flexible gooseneck, 5/8”-27 threads	**2.37**
81-GN-19	19” flexible gooseneck, 5/8”-27 threads	**3.35**

BOOM STANDS

For studio use. “Safety Air Lock Cushion” prevents sudden or ac cidental vertical movement. Boom has hangers for cable, terminate in Gyromatic Swivel for microphone. Base casting equipped wit shock absorbent, chrome plated “domes of silence.”

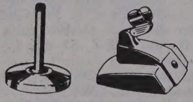
Cat.	Base	Vertical	Boom	Lbs.	Ne
81-BS-36	17” dia.	48” to 72”	62”	36	**$63.0**
81-BS-36W	Same as BS-36, with base casters			40	**71.4**
81-BB-1	Baby Boom Arm Only		31”	3½	**6.9**

STAND ACCESSORIES

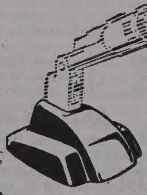
Gyromatic Swivel locks in any position. Foot Switch accepts Ar phenol 75-MC1F connectors. SO-1 Snap-On Adapter used ur versally in night clubs, etc., for easy removal of mike for hand-he use.

Cat.	Description	Ne
81-FS-1	Make Foot Switch, SP-ST-NC contacts	**$12.0**
81-BC-1	Bracket Clamp, with 6” stem	**3.6**
81-SO-1	“Snap-On” adapter for mikes	**2.8**

ELECTRO-VOICE STANDS & ACCESSORIES



423A **420**



418

423A STAND

Has 5-1/8” smooth gray base on rubber base buttons. Choice of 3 or 5” stems.

Cat. 46-423A3	3”	**Net $4.80**
Cat. 46-423A5	5”	**Net $4.80**

CLAMP MOUNTING

Snap-clamp holder for 1” diameter mikes such as model 666, 655 or 654A. Provides tilt action.

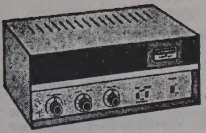
Cat. 46-420 With cast iron base **Net $15.0**

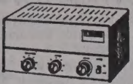
418 DESK STAND

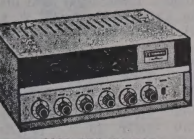
Use with microphones using small-type stud such as Models 61 623, 630, 641, 635, 636, 911, and 951. Die cast base. Gray finis

Cat. 46-418	Desk stand less sw.	**Net $ 9.3**
Cat. 46-418-S	Desk stand with sw.	**Net $12.9**

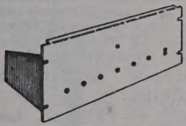
BOGEN SOUND EQUIPMENT


CHB-20A


CHB-10A


CHB-35A/50/100

LPC-4 Phono Top


Rack Mtg. Kit

CHALLENGER AMPLIFIERS
FOR ECONOMY, VERSATILITY & DEPENDABILITY

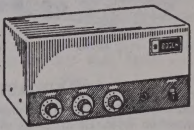
With systems-tested circuitry for continuous, heavy-duty operation. Protection against circuit damage caused by accidental shorting or disconnecting of loudspeaker lines. Single-function controls for mixing or fading inputs, plus master gain control and memory markers. Built-in remote control circuit permits use of accessory remote controller for adjustment of volume from distances up to 2000 feet. All inputs are high impedance. Mike inputs require MC1F cable connector. *For high output (0.2 v.) phono. §Both on 1 fader-type control, sensitivity 0.4 v. **For magnetic pickup, sensitivity 12-15 mv. †Fixed tone compensation, with on-off switches, all others continuously variable. ‡Ohms impedance of C-V Line Outputs. Outputs are to speaker sockets and screw terminals. All models have provision for adding 500/600 ohm line input for wired music background use. Frequency response: CHB-10 40-12,000 cps; all others 20-20,000 cps. Overall size: CHB-10 11¼" x 8¼" x 5¾" high; all others 15¾" x 10" x 6¾" high. All models operate from 105-125 v-ac 50-60 cps.

Cat.	Input			Tone	Output			Shpg.	Net
No.	Mike	Phono	Aux.	Adj.	Watts	Ohms	C-V Line V.	Lbs.	Each
8-CHB-10A	1	1*	----	Treble†	10	4/8/16/62‡	25-v.	12	$50.80
8-CHB-20A	1	...	2§	Treble/Bass	20	4/8/16/31‡/250‡	25-v., 70-v.	16	81.45
8-CHB-35A	2	1**	2§	Treble/Bass	35	4/8/16/18‡/143‡	25-v., 70-v.	18	99.90
8-CHB-50	2	1**	2§	Treble/Bass	50	4/8/16/12‡/100‡	25-v., 70-v.	21	116.85
8-CHB-100	2	1**	2§	Treble/Bass	100	4/8/16/6‡/50‡	25-v., 70-v.	26	152.25

CHB AMPLIFIER ACCESSORIES

Cat.	Description	Lbs.	Net
8-LPC-4	4-Speed Phono Top for CHB-14/20/35/50/100. For 105-125 v-ac 60 cps only	8	$29.25
8-RPK-14	Rack Panel Mounting Kit for CHB-35/50/100. Panel 7" x 19", depth 8"	7	22.45
8-RPK-15	Rack Panel Mounting Kit for CHB-20A. Panel 7" x 19", depth 8"	7	22.45
8-LK-5	Control Guard Locking Plate with Key for CHB-20/35/50/100. 3" x 15½"	1	8.65
8-WMT-1	Wired Music Transformer Assembly for 500/600 line input to CHB-10	1	11.85
8-SR-2	Remote Volume Controller for 2 inputs, Models CHB-35/50/100	2	13.45

"MTA" SOLID-STATE AMPLIFIERS
"THERMO-GUARD" HEAT PROTECTED

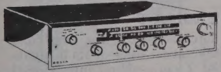

MTA10

Advanced solid-state circuitry (all-silicon except output stage) provides consistent performance over a lifetime of service. Plug-in circuit boards allow for highest possible quality control. Chimney-type heatsinks and heat sensing "thermo-guards" permit safe continuous operation to 158°F. Tantalum capacitors are used in all critical circuits. Built-in protection against shorted or open speaker lines. Separate mike and auxiliary controls for mixing or fading inputs. *Low impedance unbalanced (200 ohms). †Additional jack for output to tape or booster amplifier.

FOR 105-125 V-AC, 50-60 CPS OPERATION

Cat.	Inputs		Sensitivity		Frequency	Output‡			Size	Shpg.	Net
No.	Mike	Aux.	Mike	Aux.	Range	Watts	Ohms	C-V Line	W x D x H	Lbs.	Each
8-MTA10	1*	1	.40 mv.	.20 v.	50-20K cps	10	4/8/16/500	25-v, 70-v	10-5/8x6½x5	10	$81.00

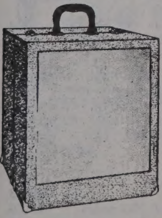
BACKGROUND MUSIC SYSTEM



COMBINES AM/FM RADIO, MIKE PAGING, PHONO & TAPE INPUTS

Combines AM/FM Radio & 30 Watt amplifier mike break-in for paging, phono & tape inputs. Specially designed for use in restaurants, hotel lobbies, bus stationing, private clubs, etc., where complete unobtrusive music coverage is required at low level. The 30 watt high fidelity amplifier will furnish power to up to 120 loudspeakers, with output for driving booster amplifier for additional speakers. It can also be used for paging announcements. A touch of a button silences the music and amplifies the voice. Built-in provision for remote mike, speaker selector switch, local speaker for tuning, remote or both. Separate volume controls for mike and program, flywheel tuning, tuning meter, auxiliary input for records, and tapes. Freq. Reponse FM 20-20,000 cps ±1db; AM 20-4500 cps ±1 db. Audio 20-20,000 cps ±1db. Amplifier has outputs of 8 ohms 25 and 70V line and tape output. Separate bass & treble controls. Size: 16¼ W x 3¾ H x 14¾" D. Wt. 20 lb. Operates from 105-125 v-ac, 50/60 cps.

Cat. 8-RM300 Complete with metal cabinet **Net $238.35**

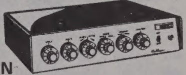


BOGEN PORTABLE SPEAKER CASES

For use with Bogen Portable Sound Systems. Cases are sturdily constructed of plywood with durable leatherette covering, protected corners and luggage type snap fasteners. Provided with handle for carrying. Cases split into two parts, each of which acts as a baffle for the speaker mounted in it. Cases with speakers include 25 foot cables with 3-pin plugs to fit the output reception on Bogen. 17¾" W x 23¾" H x 12" D.

Cat. No. 8-CC-12S Case Only **Net $74.95**

NEW SERIES "C" PA AMPLIFIERS



ECONOMY SOLID STATE PACKAGED AMPLIFIERS WITH RUGGED CONSTRUCTION

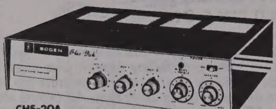
All the essentials required for reliability, versatility and quality performance are built-in. The "C" series offers a unique combination of features, dependability, and value. Continuous operation at full output from -20°C. to +50°C. Simultaneous mixing of 3 input signals; two microphones and a tuner, tape recorder or phonograph (C20 has 1 microphone input). High impedance microphone inputs. Outputs include tape, booster amplifier, balanced 25-v and balanced 70-v, balanced 4,8,16 ohms, 500/600 ohm zero level line with external WMT-1 transformers. All mike inputs equipped with RF filters. Separate master volume, bass, treble controls (except C20). High input sensitivity low noise and hum. Wide frequency response. Memory markers on controls. Constant-voltage output taps. Two loudspeaker plug-in sockets, plus screw terminals (one socket in C20) Compact, attractive styling. Accessories available for completely flexible operation. For 105-125 VAC, 50/60 cps. operation. Size: 14-5/8" W, 13-3/4" D, 3-3/4" H.

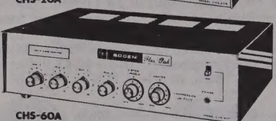
Cat.	Power	Sensitivity		Power	Shpg.	Net
No.	Output	Mic.	Aux.	Consumption	Wt.	Ea.
8-C20	20W	4 mv	.35v	54W	11 lbs.	$79.50
8-C35	35W	3 mv	.5v	60W	14 lbs.	99.45
8-C60	60W	3 mv	.5v	100W	16 lbs.	118.50
8-C100	100W	3 mv	.5v	180W	18 lbs.	148.50
8-LPC-4	4-speed phono top for C100, C60, C35					33.75

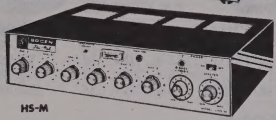
BOGEN AMPLIFIERS

CHS SOLID STATE P-A AMPLIFIERS

FOR OPERATION FROM 120V-AC, 60Hz


CHS-20A


CHS-60A


HS-M

New solid-state series of amplifiers. All have 2 microphone inputs (CHS-20A one mic). A mic inputs available as follows: High impedance unbalanced; low impedance unbalance low impedance balanced with plug in transformer; 1 mic input convertible to magnetic car ridge; cannon connectors, 2 pin XLR-311C. Plug-in mic module PMM-2 adds two additiona microphones to all models. Also adds additional magnetic phone input. 2 separate aux input all models with separate aux controls. Built-in microphone compressor. Remote Control: On microphone can be remotely controlled and all aux inputs. All microphones have precedenc over both aux inputs. Reverb in and out. Full bridging—any CHSA amplifier can be combi ed with any other CHSA to increase power and number of inputs. Two output jacks o quick speaker disconnecting. Cabinet sizes (CHS-35A, CHS-60A, CHS-100A) 16-3/8" W. 13¾" D x 4¼" H; (CHS-20A) 14-5/8" W x 13¾" D x 3¾" H. Bridging impedance 100 (18MV).

Cat. No.	Watts Output	Frequency Response	Outline Ohms	Outline C-V Line	Outline Tape	Wt. Lbs.	Ne Ea
8-CHS-20A	20	70Hz-12KHz ±2db	4-8-16	25V, 70V	1K 0	14	$118.5
8-CHS-35A	35	70Hz-12KHz ±2db	8-16	25V, 70V	1K 0	20	131.7
8-CHS-60A	60	70Hz-12KHz ±2db	8-16	25V, 70V	1K 0	23	154.3
8-CHS-100A	100	70Hz-12KHz ±2db	4-8-16	25V, 70V	1K 0	26	187.7

MODEL CHS-MA 120V-AC, 60Hz & 24-28V-DC

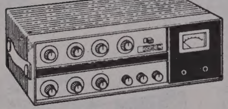
4 mic inputs (2 convert to magnetic cartridge). High impedance unbalanced; low impedanc unbalanced; low impedance balanced with plug in transformer. 2 separate aux inputs an controls. Output impedances: 150, 600 ohms to drive booster amplifier. Low level outpu can be connected to a balanced or unbalanced microphone input. High impedance can b connected to a high impedance unbalanced microphone input. VU meter with sensitivit control. Headphone monitor jack 2000 ohms. Built-in compressio Built-in tone oscillator can be used to signal announcements an can be used for time signals etc. Frequency response: 20Hz t 20KHz. Power outputs (RMS @ 1000Hz): 6V into Hi-Z; 6V int 500/600 ohms. Size: 14-5/8" W x 13¾" D x 3¾" H. Wt. 13 lb

Cat. 8-CHS-MA Amplifier with 4-mic inputs **Net $149.8**

CHSA ACCESSORIES

Cat.	Description	Ne
8-TM50	Low Impedance Transformer	$13.3
8-TM200	Low Impedance Transformer	13.3
8-TM500	Low Impedance Transformer	13.8
8-RPK-33	Rack Panel Kit	20.9
8-LK-12	Locking Cover for CHS35A, 50A & 100A	13.4
8-WMT-1	500/600 Transformer	11.8
8-LVP-1	Plug-in Remote Control/Precedence	6.7
8-RVC-2	Remote Control for 1 mike input (use with LVP-1)	11.2
8-LPC-4	Phono top	31.0
8-CC-12S	Carrying case for CHS20A, 35A, 60A	74.9

MIXER-PREAMPLIFIERS

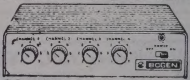

MXM-A

Provide a way of adding additional inputs to existing sound systems, or for driving a bank of booster amplifiers, either locally or remotely, in high power sound distribution systems, or where remote sections are to be covered.

BROADCAST QUALITY MXM-A

Accommodates 7 mixed input signals simultaneously, 5 of which may be from Hi or Lo-Z mikes. One mike input converts to an equalized mag. phono cartridge or tape playback head. Two aux. (Hi-Z high level) are connected to a fader control. Bridging input accepts signals from a remote preamplifier or a zero level line. Up to 3 MXM-A's may be paralleled to provide up to 21 inputs (up to 15 mikes). Hi-Z mike inputs convert to Lo-Z by addition of plug-in accessory transformers. Calibrated low frequency filter to "tune out" hum, turntable, rumble, etc. VU meter for visual and headphone jack for audible monitoring. Output: 20 volts into Hi-Z load; 4 volts into 600 ohms. Output impedance Hi-Z (less than 3000 ohms) with provision for plug-in accessory line output transformer. Frequency response 18-38,000 cps ± 1 db. Sensitivity: Hi-Z 2 mv; Lo-Z 0.1 v.; mag. 1 mv; bridging 0.5 v.; aux. 0.5 v. Separate bass and treble tone controls. Size (HWD) 4¾" x 16½" x 12". Shpg. wt. 20 lbs. Operates from 117 v-ac, 50-60 cps.

Cat. 8-MXM-A Mixer-Preamplifier **Net $202.50**



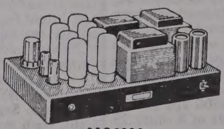
SOLID STATE MX6A-T

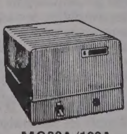
Used primarily for adding input circuits to existing amplifiers tape recorders, etc. Mixes any combination of 4 of its 6 inputs including 4 hi/lo-Z mike inputs and 2 radio-phono inputs. Individual gain controls for each channel. Frequency response 50 t 20K cps. Output 4-v., 1% distortion @ 2.25 ohms. Self-powered from 117 v-ac, 60 cps. Shpg. wt. 5 lbs.

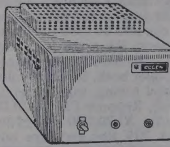
Cat. 8-MX6A-T (HWD) 2-5/8" x 9¼" x 6" **Net $56.2**

BOOSTER AMPLIFIERS

For use with preamplifiers listed above. Booster minimum size. Built-in provision for paralleling any number to multiply power output for use in large sound installations. Models MO200A, MO100A and MT100 have 115-v output, are adaptable to unique applications. With a variable frequency audio generator input they provide relatively inexpensive power sources (any frequency or voltage) for driving servos, motors, vibration (shake) tables, ultrasonic equipment, etc.


MO200A


MO30A/100A
MTB60


MT100

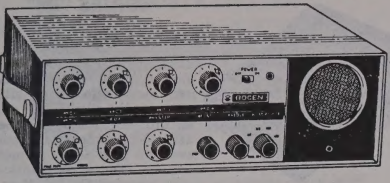
*Balanced line. †Lo-Z with T161 or T165B accessory transformer. ‡Lo-Z with TL600 accessory transformer. § With accessory transformer. **All-silicon transistor. MT100 operates from 105-125 v-ac, or 16 v-dc.;NTB250 from 105-125 v-ac, or 24 v-dc. All others operate from 105-125 v-ac, 50-60 cps.

Cat. No.	Output Watts	Output Ohms	Output C-V Line	Frequency Response	Input Imp.†	Input Sen. Hi-Z	Input Sen. Lo-Z§	Size H	Size W	Size D	Shpg. Lbs.	Ne Each
8-MO100A	100	16	25-v,* 70-v,* 115-v	8-50K cps ± 1 db	0.5 meg.	2.0 v.	0.5 v.	6¾"	8"	13"	33	165.0
8-MO200A	200	8	25-v,* 70-v,* 115-v	8-50K cps ± 1 db	0.5 meg.	2.0 v.	0.5 v.	6"	16"	11½"	45	300.0
8-MBT60**	60	2.6/8/16	25-v,* 70-v*	12-20K cps ± 1 db	0.1 meg.	.15 v.	.04 v.	6¼"	8"	13"	18	129.75
8-MT-125**	125	16	25-v,* 70-v,* 115-v	15-35K cps ± 1 db	0.1 meg.	.75 v.	.20 v.	6"	8"	13"	31	270.0
8-NTB250**	350	8	25-v, 70-v, 115-v	20-30K cps ± 1 db	10K	1.8 v.	.35 v.	9¼"	17-1/8"	11¾"	75	562.5

MO/MT/NTB ACCESSORIES

Cat.	Description	Net	Cat.	Description	Ne
8-TL600	600 ohm plug-in transformer	$13.85	8-PMC-1	Plug-in mag. phono module	$8.9
8-TM500	500 ohm plug-in transformer	13.80	8-TL10K	10K ohms plug-in bridge transf. MO series	18.7
8-TM200	200 ohm plug-in transformer	13.30	8-RVC-2	Remote volume control for MX30A, MX60A, MXM-A, CHS	11.2
8-TM50	50 ohm plug-in transformer	13.30			
8-WMT-1	500 ohm line input transformer	11.85			

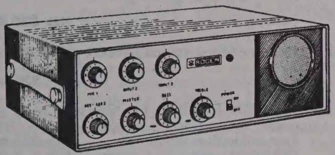
BOGEN FLEX-PAK®



"MX" PUBLIC ADDRESS AMPLIFIERS
INPUTS FOR ANY SIGNAL SOURCE
MIXES 4 MIKES & 2 AUXILIARY INPUTS
OUTPUT TO TAPE RECORDER, BOOSTER AMPLIFIER & SPEAKER LOADS

Built-in features and optional accessories make "MX" amplifiers adaptable to virtually every sound distribution or sound reinforcement requirement. Microphone inputs are H-Z, with sockets for accessory plug-in transformers to match. Lo-Z microphones, telephone lines, etc. Separate volume controls permit mixing all inputs, with an overall master gain control for convenience. Memory markers indicate pre-determined settins. Provision for use of remote volume control or precedence of all six inputs. Calibrated low frequency cut-off determines bass limit for all inputs. Speech filters for crisp voice reproduction. Separate bass and treble tone controls. *Microphone sensitivity at Hi-Z. †With fader type controls. One may be used for microphone or magnetic pickup, the other for tuner, tape player or phone. ‡Additional output jack for driving tape recorders, or booster amplifiers where high output is required. Amplifier is illustrated with but furnished without the accessory MSK-1 Monitor Speaker. Amplifiers operate from 105-125 v-ac, 50-60 cps.

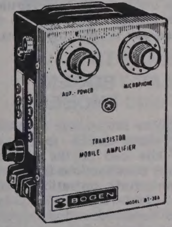
Cat.	Inputs		Sensitivity*			Frequency	Output‡			Size	Net
No.	Mike	Aux.	Mike	Mag.	Aux.	Range	Watts	Ohms	C-V Line	W x D x H	Each
8-MX30A	4	2†	3.5 mv	2.0 mv	.15 v.	10-40K cps	30	4/8/16/163	25-v, 70-v	16½" x 12" x 4¾"	$220.50
8-MX60A	4	2†	3.5 mv	2.0 mv	.15 v.	10-38K cps	60	4/8/16/83	25-v, 70-v	16½" x 12" x 4¾"	263.05



"M" SERIES PUBLIC ADDRESS AMPLIFIERS
INPUTS FOR ANY SIGNAL SOURCE
MIXES 3 MIKES & 1 AUXILIARY INPUTS
OUTPUT TO TAPE RECORDER, BOOSTER AMPLIFIER & SPEAKER LOADS

Similar to the "MX" amplifiers above but with fewer inputs and without the calibrated low frequency cut-off and speech filters. Separate volume controls for each microphone input, plus an overall master volume control. †Fader type control selects one of two auxiliary inputs. *Microphone sensitivity at Hi-Z. Each microphone input has a socket for an accessory plug-in transformer to match Lo-Z microphones, telephone lines, etc. Separate bass and treble volume controls. Provision for accessory remote volume control or precedence for microphone. ‡Additional output jack for driving tape recorders or booster amplifiers. Amplifiers operate from 105-125 v-ac, 50-60 cps.

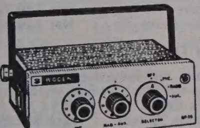
Cat.	Inputs		Sensitivity*			Frequency	Output‡			Size	Net
No.	Mike	Aux.	Mike	Mag.	Aux.	Range	Watts	Ohms	C-V Line	W x D x H	Each
8-M330A	3	1†	6.0 mv	50 mv	.30 v.	20-20K cps	30	4/8/16/163	25-v, 70-v	14-7/8"x9-7/8"x5¾"	$148.05
8-M60A	3	1†	9.0 mv	24 mv	.40 v.	20-20K cps	60	4/8/16/82	25-v, 70-v	14-7/8"x9-7/8"x5¾"	189.00
8-M120	3	1†	9.0 mv	24 mv	.40 v.	20-20K cps	120	8/16/41	25-v, 70-v	16½" x 12" x 4¾"	255.15



MOBILE BT20A
ALL-TRANSISTOR
25 WATT AMPLIFIER

For mobile operation from 12-14 v-dc. Full power consumption 2.8 amps. Has inputs for 1 Lo-Z mike and 1 auxiliary (tuner, tape, phono). Input sensitivity: mike 1 mv.: aux. 0.4 volts. Output 25 watts into 4/8/16 ohm speakers. Uses 5 transistors. Overall size (HWD) 6½" x 4½" x 4". Shipping weight 5 lbs. Controls for mike and aux. inputs. Equipped with protective fuse in retractable mounting.

Cat. 8-BT20A Mobile Amplifier **Net $67.95**

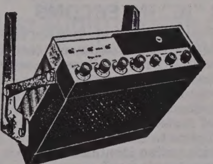


MOBILE BT35A
ALL-TRANSISTOR
40 WATT AMPLIFIER

For police, fire, CD and similar uses. Splash-proof cabinet seal. Inputs for 1 Lo-Z mike, 1 aux. for tuner, tape or phono, and 1 aux. for accessory siren tone generator. Sensitivity: mike 1 mv.; aux. 0.4 volts. Output impedance 4/8/16 ohms. Power consumption 3.6 amps at 12-14 v-dc. Frequency response 150-15,000 cps. Separate volume controls for mike and one aux. input. Uses 5 transistors and 1 diode. Overall size (HWD) 3" x 8" x 6¼". Shpg. wt. 8 lbs.

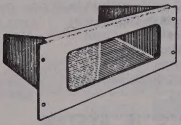
Cat. 8-BT35A **Net $92.70**

MX & M ACCESSORIES

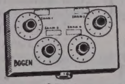


LWM

LPC-4



RPK-16



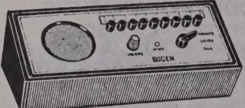
SR-4

T50/200/500

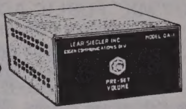
Matching accessories for use with the MX & M Amplifiers listed above. For more complete information request a Bogen Catalog No. 207.

Cat.	Description	Net
8-LPC-4	4-Speed Phone Top for MTX,MX &M Amplifiers	$31.00
8-LWM	Wall Mounting Kit for MTX, MX &M Amplifiers	12.75
8-RPK-16	Rack Mounting Kit for MTX & MX Amplifiers	22.45
8-RPK-21	Rack Mounting Kit for M Amplifiers	22.45
8-LK-6	Locking Control Guard Plate for MTX & MX	11.10
8-LK-8	Locking Control Guard Plate for M	8.95
8-SR-2	2-Channel Remote Control for MX & M	13.45
8-SR-4	4-Channel Remote Control for MX & M	18.90
8-MMS-1	Monitor Speaker & Meter for MTX & M	29.90
8-MSK-1	Monitor Speaker Panel for MTX, MX & M	8.95
8-TM50	50 Ohm Plug-In Mike Transformer	13.30
8-TM200	200 Ohm Plug-In Mike Transformer	13.30
8-TM500	500 Ohm Plug-In Mike Transformer	13.80
8-PMC-1	Mag. Phono/tape to MX/M mike input	8.95
8-CON-1	Mike connector for M Series	1.65

BOGEN INTERCOM SYSTEMS



OMW-9



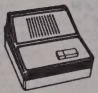
OA-1

EXECUTIVE SERIES "9"

SOLID STATE INTERCOM

Provides simplicity of operation in systems using a total of up to 9 master, or master and remote stations. Masters have 8 selective push-buttons, talk/listen switch, volume control, "in use" pilot light, and high efficiency 8-ohm speaker. Masters can originate calls to any other master or remote station and, when called by another master, reply "hands off." Up to 3 master stations may participate in conference calls. Remote stations cannot originate calls but reply "hands off" when called by a master station. Masters are available for desk or wall mounting, remotes for surface or flush wall mounting, or outdoor use. The OA-1 fully transistorized amplifier furnishes all power required by the system. It operates from 105-125 v-ac, consumes only 8 watts. The OA-1 has a volume control (screw set), on/off power switch, and an 8-ohm output. Overall sizes (HWD) masters: OMW-9 5½" x 12¾" x 5"; OMF-9 4¾" x 12" x 3½". Amplifier (HWD) 4¾" x 8½" x 2¾". Remotes: WB6/L115A 9" x 7½" x 3"; HCR-1 steel panel 6-3/8" x 4½" h.; MIL-A8 7-13/16" dia. x 6-7/8" deep.

Cat.	Description	Lbs.	Net
8-OMW-9	Desk mounting master station		$82.45
8-OMF-9	Flush wall mounting master station		74.20
8-OA-1	Solid state amplifier/power unit		57.70
8-WB6/L115A	Surface mount remote, 6" speaker		10.30
8-HCR-1	Flush mounting remote, steel panel		21.90



RIE-1

IE-4S

IE-7

IE-13

ALL-MASTER "IE" INTERCOMS

Provide multiple conversation systems using up to seven IE-7's or up to thirteen IE-13's. One RIE-1 non-private remote (or any 16 ohm loud speaker) may be substituted in the IE-7 system, or two in the IE-13 system. Any master may call one or more stations or page thru the existing plant P.A. system. In addition, with optional TBR-1 accessory relay any master may page thru the plant P.A. system and receive "hands free" replies from loudspeaker trumpet. Master has a volume control, press to talk bar with dictate lock, push-push selector switches with station identification strips, and compact 120 v-ac, 50/60 Hz power supply (easily converted to 12 v-dc operation). Audio output 1 watt peak. Size (HWL) 4-3/8" x 6-7/8" x 7-9/16". Use unshielded cable with at least one more conductor than the number of stations in the system.

Cat. 8-IE-7	7-Station Master Intercom	Net	$41.20
Cat. 8-IE-13	13-Station Master Intercom	Net	50.35
Cat. 8-RIE-1	Remote Station	Net	13.35
Cat. 8-TBR-1	Optional Talk-Back Relay	Net	29.95
Cat. 8-JB-E	Junction Box	Net	5.55

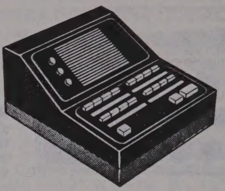
MASTER-REMOTE "IE" SYSTEM

Use one IE-7 and up to six RIE-1's, or one IE-13 and up to twelve RIE-1's. Master may call one or more remotes simultaneously, or page thru an existing plant P.A. system, and (with optional TBR-1 talk-back relay) receive replies. Remotes have press-to-talk bar and privacy switch, may originate calls to masters. Use a three conductor unshielded cable between master and each remote.

IE-4S ANNUCIATOR SYSTEM

IE-4 master may be used, with up to three RIE-1 remotes and may call one or all as desired. Remotes may originate calls to the master by means of a beep-tone and magnetic annuciator. Annuciator remains visible until cleared from master station. Master has press-to-talk bar, three push-button selector switches (each with annuciator), beep-tone call button and clearing button. Master is furnished with external 120 v-ac, 50/60 Hz power supply (easily converted to 12 v-dc). Use unshielded 2-conductor cable between master and each remote.

Cat. 8-IE-4S	1-Master, 1-Remote System	Net	$49.75
Cat. 8-RIE-1	Additional Remote	Net	13.35



SERIES "IM"

SOLID STATE INTERCOMS

Units available for 9 or 17 sta tion systems, either all-mas ter, master-remote, or inter mix combination. Solid stat circuitry for trouble-free oper ation. Masters are in attractiv two-tone gray plastic cabinets Station selector pushbutton may be wired for 1 watt or watts output, depending on noise level in remote station are Other features include talk-listen button with "dictate" lock, stand by button, privacy button and separate indicator lights for privacy busy indication and standby. Indicator light on master show when remote is bush. If not busy the remote may operate "hand off" by pressing privacy button, and the master performs the talk listen function. Masters operate from 120 v-ac, 50/60 Hz, consum 10 watts. Output impedance 45 ohms balanced line. Size (HWD 5" x 7¾" x 9¼". Wt. 8 lbs.

Cat. 8-IM-9	9-Station Master Intercom	Net $116.9
Cat. 8-IM-17	17-Station Master Intercom	Net $149.9

RIM-1 REMOTE can reply to any calling master, or initiate a ca to 1 master. It has a volume control and privacy switch. Siz (HWD) 4-3/8" x 6-7/8" x 7-9/16". Wt. 3 lbs.

Cat. 8-RIM-1	Remote Station	Net $20.2

RIM-3 REMOTE is similar to RIM-1 but has selective call initiatio to 3 different masters.

Cat. 8-RIM-3	Net $29.9

TBS-45 OUTDOOR/INDOOR REMOTE for high level noise o outdoor areas. Immune to weather conditions. Wt. 4 lb

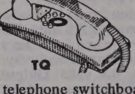
Cat. 8-STB-45	Less call initiate switch	Net $23.4
Cat. 8-CS-1	Call initiate switch to 1 master	Net $ 8.9
Cat. 8-JB-X	Cable junction box	Net $ 9.7

WIRING NOTES

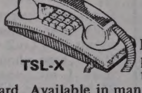
MASTER-REMOTE Systems require one individual unshielde twisted pair to each remote, and one shielded twisted pair fro master to and common with all remotes for call initiatio

ALL-Master Systems require an unshielded cable with one mo twisted pair than the number of master in the system.

MULTIPLE-MASTER MULTIPLE-REMOTE Systems require a unshielded cable with one more pair than the number of master between masters. If remotes are not to initiate calls they requi a single unshielded twisted pair to the master. If remotes are t initiate calls an additional single shielded pair is used to each ma ter.



TQ



TSL-X

BOGEN PHONES

For inter-office or inte plant service to relie the load on the existin telephone switchboard. Available in many combinations from tw to sixteen units, either private or non-private operation. Eas to install and inexpensive to operate. Light-weight and sturd For desk or wall mounting. Units are furnished complete wit junction box and four foot coiled, snarl-proof cord. One power su ply (operating from 120 v-ac, 50/60 Hz) is required for each systen

2-STATION TQ SYSTEM

Each station complete with ring button.

Cat. 8-TQ-1A	Pair of TQ-1 Units	Net $46.1
Cat. 8-PRS-1A	Power Supply for above	Net $25.0

7 OR 13-STATION TQ SYSTEMS

For up to 7 or 13 stations in a low-cost, fast operating system. Fe tures selective ringing with common-talk line. Permits conferen calls, but only one conversation at a time.

Cat. 8-TQ-6A	For up to 7-Station System	Net $29.8
Cat. 8-TQ-12A	For up to 13-Station System	Net $33.4
Cat. 8-PRS-1A	Power Supply for above	Net $25.0
Cat. 8-PRS-5	Multi-Mix Adapt.	Net $134.9

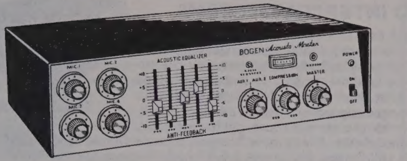
8 OR 16-STATION TSL-X SYSTEMS

As many as eight separate conversations may take place at th same time in a 16-station system, or four in an 8-station system. A may participate in a conference call. Units have one ring butto the remainder are station selector buttons. Each set has pagin button.

Cat. 8-TSL-8X	For up to 8-station system	Net $49.6
Cat. 8-TSL-16X	For up to 16-station system	Net $57.0
Cat. 8-TSL-1X	Single button remote telephone	Net $31.6
Cat. 8-PRS-16A	Power supply for above	Net $41.5

BOGEN

"ACOUSTA-MASTER"



SOLID STATE P-A AMPLIFIERS

BUILT-IN ANTI-FEEDBACK EQUALIZER & ELECTRONIC COMPRESSOR

"Acousta-Master" equalizer filter slide controls permit boosting or attenuating any or all of five selected frequencies (80 Hz, 300 Hz, 1 kHz, 3kHz, 10 kHz) to "tune out" acoustic feedback, increase usable power, and improve intelligibility. An electronic compressor assures uniform output regardless of input level variations such as result from poor microphone technique. It also eliminates "blasting" in background music applications.

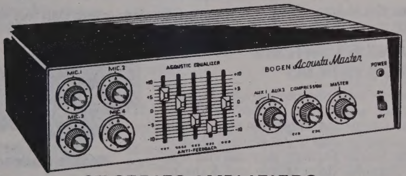
CTM MIXER-PREAMPLIFIER

4 HI-Z MIKE & 2 AUX. INPUTS

OUTPUT 6 V. TO HI-Z OR LINE

Incorporates "Acousta-Master" filter and compressor features described above. Hi-Z inputs convertible to Lo-Z by use of accessory plug-in transformers. Provision for remote volume control of two mike and one aux. inputs. Input sensitivity: Hi-Z mike 3 mV; Lo-Z mike 0.3 mV; Aux. 0.3 V.; Bridging 30 mV. Frequency response ±1 db from 20 Hz to 20 kHz. Output impedances: 6000 balanced c.t.; 6000 unbalanced; 1500 balanced; 1500 unbalanced; tape output; bridging output; monitor headphone jack. Output regualtion: 1 db. All silicon transistor circuitry. For 120 v-ac, 50-60 Hz operation. Size 16-3/8" x 12-3/4" x 4" high.

Cat. 8-CTM Mixer-Preamplifier **Net $191.25**



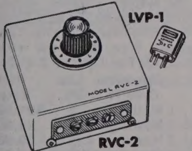
CT SERIES AMPLIFIERS

RESETTABLE CIRCUIT BREAKERS

VOICE COIL & C-V LINE OUTPUTS

Complete P-A power amplifiers incorporating all of the features of the Model CTM Preamplifier listed above. Frequency response ±2 db from 50 Hz to 15 kHz. Power response -2 db, 60 Hz to 12 kHz at 5% distortion. Power output distortion less than 2% at 1 kHz at full rated power. Output regulation 2 db. Outputs: 4, 8, 16 ohm speaker taps; 25-v ct and 70-v balanced lines; tape, booster and bridging outputs; 500/6000 telephone line output with WMT-1 optional accessory plug-in transformer. Amplifiers are completely solid state. Operation is from 120 v-ac, 50/60 Hz. All are 16-3/8" wide, 13¾" deep, and 4¼" high.

Cat. No.	Audio Output	A-C Power	Circuit Breaker	Net Each
8-CT30	30 Watts	96 Watts	1.25 Amp.	**$183.60**
8-CT60	60 Watts	170 Watts	2.50 Amp.	**214.20**
8-CT100	100 Watts	300 Watts	4.00 Amp.	**260.10**



REMOTE CONTROLLERS

For remote control of volume Models CTM, CT30, CT60 and CT100 listed above. Operates at distances up to 2,000 feet from the amplifier. Provides channel muting for precedence or remote volume control of two microphones and one auxiliary input. LVP-1 is used as a remote control of aux. inputs (with RVC-2) and in addition a second chassis socket permits installation of another LPV-1 to provide automatic limiting of amplifier output to any predetermined level.

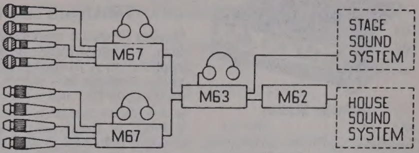
Cat. 8-RVC-2	Remote Mixer/Volume Control	**Net $11.25**
Cat. 8-LPV-1	Remote Control/Peak Limiter	**6.75**

PLUG-IN TRANSFORMERS

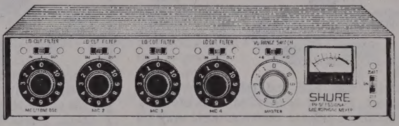
Cat. 8-TM50	50-ohm Mike to Hi-Z Amplifier Input	**Net $13.30**
Cat. 8-TM200	200-ohm Mike to Hi-Z Amplifier Input	**Net $13.30**
Cat. 8-TM500	500-ohm Mike to Hi-Z Amplifier Input	**Net $13.80**

SHURE

TOTAL COMMUNICATIONS SYSTEM



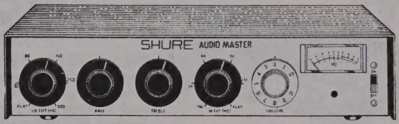
A complete system, as illustrated above, for balancing the sound from vocalists and orchestra, and feeding a high gain signal to the stage P-A speakers and house P-A speakers without overloading the house P-A system and speakers.



M67 PROFESSIONAL MIXERS

Separate mixers are used for vocal and instrumental sound pick-up in order to obtain a good balance. Each M67 has four Lo-Z microphone inputs and one line input. Built-in tone oscillator provides calibration signal to balance signal levels. Features include a 600-ohm balanced line output and low impedance microphone level output; an illuminated VU meter calibrated for +4 and +10 dbm into a 600-ohm line; extremely low noise and RF susceptibility; flat frequency response; two-level headphone monitor jack, 120 v-ac or battery operation. Automatic switch-over to battery operation in case of ac line failure. Overall size 11-3/8" wide, 7" deep, 2-23/16" high.

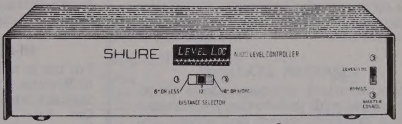
Cat. 24-M67	M67 Professional Mixer	**Net Each $162.00**
Cat. 24-A67B	Battery Power Supply	**Net $15.00**



M63 AUDIO MASTER CONTROL CENTER

Used for total control of the audio output, response, etc., of Model M67 mixer/remote amplifiers. Has continuously variable high-pass and low-pass, 6 db-per-octave filters that together with treble, bass, and volume controls produce virtually unlimited response characteristics for feedback control, acoustic correction, special effects and noise reduction. Illuminated VU meter calibrated for +8 dbm or switchable for variable -20 to +4 dbm operation into a 600-ohm line. Two high level inputs, five outputs, including 600-ohm balanced line; high level, high impedance; high impedance microphone level; low impedance microphone level; and two level headphone jack for monitoring. Overall size same as M67 above.

Cat. 24-M63 Audio Master Control Center **Net $96.00**



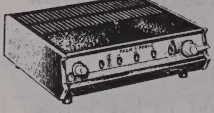
M62 LEVEL-LOC®

AUDIO LEVEL CONTROLLER

Designed to keep the electrical output from a microphone constant, even though the input signal varies considerably. It is a transistorized, variable-gain amplifier which cannot increase the strength of a signal, but when large signals are applied, it can reduce the signal virtually instantly by as much as 100 times. All this without significant distortion. With the Level-Loc Distance Selector you can create a 6", 12", or 18" diameter Sound Control Zone in front of the microphone. Outside the Sound Column Zone the microphone acts normally, but when a performer gets within this zone, his voice level is evenly modulated so that close-up blasting and "roller coaster" sound are elminated. A switch enables you to bypass the Level-Loc desirable (microphone operation normally). Operates from M67 Mixer, or from an A67B auxiliary battery supply.

Cat. 24-M62 Audio Level Controller **Net $60.00**

TALK-A-PHONE



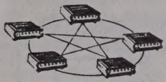
Master Station

TRANSISTORIZED INTERCOM SYSTEMS

Remote Station

Quality intercom systems designed for the Office, Business, Professional Man, Industrial Plant, Home, Farm or any other commercial or private application. A flick-of-the-finger gives instant and direct two-way conversation between two points. Deluxe systems are easy to install, withstand continuous day and night operation. Masters have translucent indicator which shows system is "on." Custom designed cabinets combine the look and feel of fine-grained leather with the strength and rigidity of steel. Charcoal gray finish resists abuse, corrosive industrial liquids and atmospheres. Panels have brushed chrome finish. Master Stations UL approved for 110-120 v-ac/dc operation. Master Stations measure 10½" wide, 8¾" deep, 3-1/8" high. Remote Stations measure 7 wide, 8¾" deep, 2-7/8" high.

ALL-MASTER



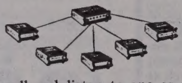
Uses all Master Stations for complete privacy of operation. Any Master may call and talk to any other Master. When 4 or more Masters are used 2 or more private conversations may be carried on simultaneously.

Cat. No.	System Total	Lbs. Wt.	Net Each
313-K-LS-5	5-Station	7	$52.50
313-K-LS-10	10-Station	7	65.00
313-K-AC-505*	5-Station	7	65.00
313-K-AC-510*	10-Station	7	77.50

*Hi-power Masters for use in large or noisy areas. †Wall mounting Remote Station. ‡5-watt wall mounting Remote. §15-watt re-entrant trumpet Remote. #Wall mounting talk-listen switch for use with K-HP-3 or K-C-20.

Use 6-cond. cables between K-LS-5 Masters, 11-cond. cables between K-LS-10 Masters.

MASTER-REMOTE

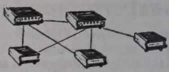


Uses one Master and multiple Remote Stations. Master may call and listen to one or all Remotes simultaneously. Remotes may originate calls to the Master but cannot talk to each other. Remotes may be operated "private" or "non-private." Once conversation has been initiated Remotes may reply from a distance without operating switches.

Cat. No. 313-⋆	System Total	Lbs. Wt.	Net Each
K-ML-5	5-Station	7	$52.50
K-ML-10	10-Station	7	65.00
K-AC-5406	5-Station*	7	65.00
K-AC-5411	10-Station*	7	77.50
K-LR-3	Remote	4.5	23.00
K-LR-3R	Remote†	4	18.50
K-HP-3	5-W Remote‡	9	24.00
K-C-20	15-W Remote§	5	33.00
K-S-100	Wall Switch#	1	5.25

Use 3-cond. cables from K-LM-5 or K-LM-10 Masters to each Remote Station.

COMBINATION



A very fle ble system corporat more than Master S tion, with one or more Remote sub tion. Masters may call and talk to e other, or to their substations. When 4 more Masters are used 2 or more vate conversations may be carried simultaneously. Remotes cannot initi calls or talk to each other.

Cat. No. 313-⋆	System Total	Lbs. Wt.	Ea
K-CL-5	5-Station	7	$63
K-CL-10	10-Station	7	76
K-AC-605	5-Station*	7	76
K-AC-610	10-Station*	7	88
K-LR-2	Remote	4.5	23
K-LR-2R	Remote†	4	18
K-HP-3	5-W Remote‡	9	24
K-C-20	15-W Remote§	5	33

Use 5-pr. cable between K-CL-5 Mast 13-pr. cables between K-CL-10 Mast Use 1-pr. cables from Masters to Remo

⋆Be sure to include entire Cat. No. w ordering.

"CHIEF" TRANSISTORIZED INTERCOM SYSTEMS

Master Station

Remote Station

Versatile and flexible units for every intercom need in offices, sales organizations, factories, institutions and home. "Chief" intercom units provide instant action, save time and steps and reduce the load on busy switchboards. They may be used in All-Master, Master-Remote or Combination Systems. Master Stations may call and talk with other Master and Remote Stations. Both Master and Remote Stations have a busy signal indicator but Stations may over-ride this signal for important m sages. Master Stations have a built-in incoming call chime which may be cut off at the convenience of the operator, plus provision actuating external relays for controlling accessory gongs, sirens, lights or other signalling devices. Master Stations operate from v-ac 50-60 Hz. Master Station power supplies are parallel wired through the interconnecting cables so that if no wall outlet is avail as many as 30% of the total number of Masters may operate without power line connections. Remote Stations require no operating po Master Stations are equipped with a connecting cable and terminal box. The All-Master, Master-Remote and Combination diagr shown in the listing above also correspond to the ones shown below.

ALL-MASTER

Used where every station must call and talk with one or all other stations. All stations are Masters and as many may be used as required. Where 4 or more are used 2 or more private conversations may be carried on simultaneously. One Master may talk to others simultaneously for conferences.

MASTER STATIONS

For use in the systems outlined above. Equipped with push-button station selection, talk-listen switch and volume control. Overall size 14" wide, 8¾" deep, 3-1/8" high. Finish is charcoal gray with brushed chrome trim.

Cat. No.	System Total	Lbs. Wt.	Net Each
313-K-C-4906	6-Station	15	$118.00
313-K-C-4912	12-Station	15	132.00
313-K-C-4920	20-Station	16	158.00
313-K-C-4930	30-Station	18	182.00
313-K-C-4940	40-Station	20	206.00
313-K-C-4950	50-Station	22	230.00

MASTER-REMOTE

Used where it is necessary for one person to call or check with remote areas. Uses one Master and as many Remotes as needed. Master may call and receive replies from any Remote. Remotes can reply from a distance, may originate calls to the Master, but cannot talk to other Remotes.

HI-POWER MASTERS

For use in noisy areas. Power output up to 30 watts. Otherwise same as the Master Stations listed at the left.

Cat. No.	System Total	Lbs. Wt.	Net Each
313-KCRP-5912	12-Station	20	$201.00
313-KCRP-5920	20-Station	21	226.00

CRADLE PHONE

For use on Masters, K-C-41 and K-C-42 Remotes. When phone is lifted from cradle internal intercom speaker is disconnected. All "H" suffix to Cat. No. when ordering.

Additional Cost Net $38.00

COMBINATION

A combination of the two systems at left. Masters may call and talk to other Master, and to any Remote. motes may reply to their Masters, or o inate calls to them, but Remotes may talk to other Remotes. See Masters left and Remotes listed below.

REMOTE STATIONS

For use in the systems outlined ab with the Masters listed to the left. § flush wall mtg. *Hi-power, wall mtg. power re-entrant horn. ‡For use w HP-3 or K-C-20. ‡‡For HP-3 or K-C-

Cat. No.	Originates Calls To	Lbs. Wt.	E
313-K-C-41	1 Master	5	$31
313-K-C-41R	1 Master§	5	26
313-K-C-42	2 Masters	5	39
313-K-HP-3	5-Watt Stn.*	9	24
313-K-C-20	15-Watt Stn.†	5	33
313-K-S-101	1-Stn. Sw.‡	1	10
313-K-S-102	2-Stn. Sw.‡‡	1	17

INTERCONNECTING CABLES

Cat.	Type	For Use With	Net Ft.
313-6214	7 pr.	K-C-4906	$ .23
313-6226	13 pr.	K-C-4912/20/30/40/50, K-C-RP-5912/20	.44

Cat.	Type	For Use With	Ne
313-6206	3 pr.	K-C-41/42/41W, K-S-101/102	$
313-6902	1 pr.	K-C-20, K-HP-3	

All-Master or Combination Systems uses 7-pr. cable between Model K-C-4906's, 13-pr. cables between all other model Masters.

"SCOTCH" RECORDING TAPES

HIGH ENERGY CASSETTES

"POSI-TRAK" BACKING

Scotch
HIGH ENERGY · 3M's finest for full balanced sound and concert hall presence
C-45
CASSETTE
3M

Reel-to-reel sound in the convenient cassette format. Fully compatible with all popular cassette systems. High Energy Cassettes offer a full 3 to 5 db increase in signal-to-noise ratio. They provide a dynamic range, sensitivity and output unheard of at cassette tape speed until now. An exclusive 3M technological breakthrough, cobalt-energized oxide, is responsible for this dramatic improvement in cassette sound. Featured also is 3M's new "POSI-TRAK" backing which gives additional assurance of jam-free cassette function and optimum, drop-out-free tape performance. Individual packaging in box with index label.

Cat. No.	Recording Time	Storage Box*	Net 1-11	12-Up
222-S-C-45-HE	22.5min./side	Album	$2.20	$1.93
222-S-C-60-HE	30min./side	Album	2.40	2.10
222-S-C-90-HE	45min./side	Album	3.60	3.15

LOW NOISE/HIGH DENSITY CASSETTES

222-S-C-45	22.5min/side	Album	$1.80	$1.58
222-S-C-45M	22.5min/side	Mailer	1.80	1.58
222-S-C-60	30min/side	Album	2.00	1.75
222-S-C-60M	30min/side	Mailer	2.00	1.75
222-S-C-90	45min/side	Album	3.00	2.63
222-S-C-90M	45min/side	Mailer	3.00	2.63
222-S-C-120	60min/side	Album	4.00	3.50

HIGHLANDER® /LOW NOISE CASSETTES

222-H-C-45	22.5min/side	Plastic Box	$1.04	$0.91
222-H-C-60	30min/side	Plastic Box	1.12	.98
222-H-C-90	45min/side	Plastic Box	1.80	1.58
222-H-C-120	60min/side	Plastic Box	3.04	2.66
222-H-C-60-3/B	30min/side	3 in a Bag	2.84	2.49

8-TRACK CARTRIDGES

HIGH OUTPUT/LOW NOISE CARTRIDGES

222-8TR-45-HO/LN	60 min.	....	$2.44	$2.14
222-8TR-90-HO/LN	90 min.	....	2.94	2.58

LOW NOISE/DYNARANGE® CARTRIDGES

222-S-8TR-45	45 min.	....	$2.00	$1.75
222-S-8TR-90	90 min.	....	2.44	2.14

OPEN REEL TAPES

HIGH OUTPUT/LOW NOISE

222-206-1/4-R60	60 min.†, 7"reel	Plastic	$4.89	$4.27
222-207-1/4-R90	90 min.†, 7"reel	Plastic	6.16	5.39

LOW NOISE/DYNARANGE®

222-211-1/4-R30	30 min.†, 5"reel	Paper	$2.16	$1.89
222-211-1/4-R60	60 min.†, 7"reel	Plastic	3.24	2.84
222-212-1/4-R45	45 min.†, 5"reel	Paper	3.00	2.63
222-212-1/4-R90	90 min.†, 7"reel	Plastic	5.32	4.66
222-213-1/4-R120	120 min.†, 7"reel	Plastic	8.00	7.00
222-214-1/4-R90	90min.†, 5"reel	Paper	5.32	4.66
222-214-1/4-R180	180 min.†, 7"reel	Plastic	9.56	8.37

HIGHLANDER®/LOW NOISE

222-228-1/4-R60	60 min.†, 7"reel	Paper	$2.48	$2.17
222-229-1/4-R90	90 min.†, 7" reel	Paper	4.00	3.50

LIVING LETTERS

222-111-1/4-150LL	7.5 min.†, 3"reel	Mailer	$0.76	$0.67
222-200-1/4-300LL	15 min.†, 3"reel	Mailer	1.46	1.31
222-214-1/4-R30LL	30 min.†, 3"reel	Mailer	2.12	1.86

EXTERNALLY LUBRICATED

222-156-1/4-1800	7" reel	Paper	$4.32	$3.78

*Album referes to plastic storage box. Mailer referes to plastic postal-approved mailing container.

†Recording time: Recording both directions at 7½ips.

ACCESSORIES

SPLICING TAPE

Cat. No.	Size	Net 1-11	12-Up
222-41-1/2-12.5	1/2" x 150"	$0.48	$0.43
222-41-7/32-66	7/32" x 66'	.71	.64
222-41-1/2-66	1/2" x 66'	1.16	1.04
222-620-7/32-66*	7/32" x 66'	2.60	2.28
222-620-1/2-66*	1/2" x 66'	3.90	3.41

*Always use 620 when splicing tapes with "POSI-TRAK" backing.

SK SPLICING KIT

SK Splicing Kit includes a splicing block and 12.5 ft. of polyester splicing tape on dispenser.

222-SK-7/32-12.5	Splicing Kit	$1.39	$1.25

ACCESSORIES CONT'D.

ALUMINIZED SENSING TAPE

Cat. No.	Size	Net 1-11	12-Up
222-51-7/32S	7/32" x 150"	$1.43	$1.32

LEADER AND TIMING TAPE

Cat. No.	Color	Length	Net 1-11	12-Up
222-24W-1/4-100	White	100'	$0.60	$0.54
222-24Y-1/4-100	Yellow	100'	.60	.54

EMPTY SELF-THREADING REEL

Each reel comes with plastic collar and lables.

Cat. No.	Size	Net 1-11	12-Up
222-PRST-7	7"	$1.00	$0.90

EMPTY PLASTIC REEL IN PAPER BOX

222-RB-1/4-5	5"	$0.44	$0.39
222-RB-1/4-7	7"	.57	.51

EMPTY 7" PLASTIC BOX

222-PB-7	7"	$1.19	$1.08

EMPTY ALBUM CASSETTE PLASTIC STORAGE BOX

222-S-CB	Includes index label	$0.26	$0.23

PLASTIC MAILING CONTAINERS

Cat. No.	Description	Net 1-11	12-Up
222-LL-1/4-3	Empty container only	$0.30	$0.27
222-RLL-1/4-3	With 3" empty reel	.40	.36

INDUSTRIAL TAPES

"H" indicates NARTB hub less sides, "RO" indicates complete aluminum reel and NARTB hub. "RPS" type are fiberglas reels with solid hub and 5/16" center hole. "RPL" indicates fiberglas reel with 3" dia. NARTB center hole.

OPEN REEL TAPES

HIGH OUTPUT/LOW NO!SE

Cat. No.	Length (Ft.)	Reel Size	Net 1-11	12-Up
222-206-1/4-2500H	2500	HUB	$7.28	$6.38
222-206-1/4-2500RO	2500	10½"	9.64	8.42
222-206-1/4-2500R	2500	10½"	9.64	8.42
222-207-1/4-3600H	3600	HUB	11.20	9.80
222-207-1/4-3600RO	3600	10½"	13.52	11.83
222-207-1/4-3600R	3600	10½"	13.52	11.83

LOW PRINT/LOW NOISE

222-208-1/4-600	600	5"	$1.87	$1.68
222-208-1/4-1200	1200	7"	3.07	2.76
222-208-1/4-2500H	2500	HUB	6.16	5.39
222-208-1/4-2500RO	2500	10½"	8.16	7.14
222-209-1/4-900	900	5"	2.60	2.34
222-209-1/4-1800	1800	7"	4.47	4.02
222-209-1/4-3600H	3600	HUB	9.46	8.28
222-209-1/4-3600RO	3600	10½"	11.45	10.02

ACCESSORIES

SPLICING TAPE

Cat. No.	Tape Size	Tape Description	Net 1-11	12-Up
222-41-3/4-66	¾" x 66'	Splicing	$1.52	$1.37
222-20-1/4-900	¼" x 900'	Leader	1.67	1.50
222-21-1/4-1000	¼" x 1000'	Leader	3.00	2.70
222-23W-1/4-1000	¼" x 1000'	Leader & Timing	3.00	2.70

EMPTY REELS IN BOX

Cat. No.	Reel Size	Box Description	Net 1-11	12-Up
222-RB-1/4-10½RPL	10½"	Plastic	$3.00	$2.70
222-RB-1/4-10½RPS	10½"	Plastic	3.00	2.70
222-RB-1/4-8M	8"	Metal	6.00	5.40
222-ROB-1/4-10½M	10½"	Metal	5.42	4.88
222-RB-1/4-10½M	10½"	Metal	5.42	4.88

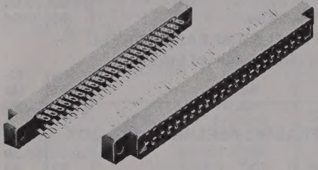
EMPTY PAPER BOXES

222-B-1/4-5	5"	Paper	$0.28	$0.25
222-B-1/4-7	7"	Paper	.34	.31
222-B-1/4-10½	10½"	Paper	.98	.88

CINCH CONNECTORS

STANDARD PC CONNECTORS

STANDARD EDGE CONNECTORS WITH SOLDER TAB CONTACTS/ .156″ SPACING - SINGLE OR DOUBLE READOUT FOR 1/16″ PRINTED CIRCUIT BOARDS



FEATURES AND SPECIFICATIONS

SPECIAL FEATURES: Patented bifurcated bellows contacts Pat. No. 3274532 provide added contact reliability especially in applications where vibration and board irregularities are involved.

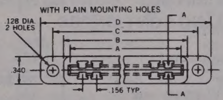
SIZES: Both single and double readout versions are available in 6, 10, 12, 15, 18, 20, 22 and 25-contact position sizes.

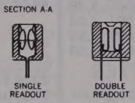
TERMINATION: Bifurcated contacts with conventional .115″ x .050″ slot solder tabs.

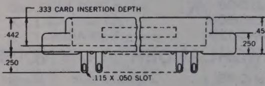
INSULATOR MATERIAL: Green glass-filled diallyl phthalate, type SDG-F per MIL-M-14.

CONTACT MATERIALS & PLATING: Contacts are available in either phospho bronze or beryllium copper. Standar finish is 30 micro-inches gold. Berylliun copper contacts can also be supplie with special finish of 50 micro-inche gold to meet MIL-C-21097B.

POLARIZING KEY MATERIALS: Two type of polarizing keys are available, an must be ordered separately as follows Part No. 456-07-35-003 (for between contact polarization) is made of glas epoxy; Part No. 474-11-54-200 (for i contact polarization) is made of dially phthalate.







SINGLE READOUT

NO. OF CONTACT POSI-TIONS	CINCH PART NO.	FACTORY PART NO.	EACH* 1-24	25-* 49	50-* 99	100-* 249	DIMENSIONS					NO. OF CONTACT POSI-TIONS
							A	B	C	D	E	
6	50- 6A-20	250-06-30-170	1.46	1.18	1.02	.82	1.100	1.239	1.531	1.785	1.937	6
10	50-10A-20	250-10-30-170	1.98	1.62	1.36	1.14	1.724	1.864	2.156	2.410	2.562	10
12	50-12A-20	250-12-30-170	2.24	1.90	1.55	1.27	2.036	2.177	2.469	2.723	2.875	12
15	50-15A-20	250-15-30-170	2.65	2.15	1.85	1.53	2.504	2.645	2.937	3.191	3.343	15
18	50-18A-20	250-18-30-170	3.04	2.48	2.12	1.75	2.972	3.114	3.406	3.660	3.812	18
22	50-22A-20	250-22-30-170	3.57	2.93	2.50	2.06	3.596	3.739	4.031	4.285	4.437	22
25	50-25A-20	250-25-30-170	4.25	3.47	2.96	2.46	4.067	4.208	4.500	4.754	4.906	25

DOUBLE READOUT

NO. OF CONTACT POSI-TIONS	CINCH PART NO.	FACTORY PART NO.	EACH* 1-24	25-* 49	50-* 99	100-* 249	DIMENSIONS					NO. OF CONTAC POSI-TIONS
							A	B	C	D	E	
6	50-12A-30	251-06-30-160	1.46	1.18	1.02	.82	1.100	1.239	1.531	1.785	1.937	6
10	50-20A-30	251-10-30-160	1.98	1.62	1.36	1.14	1.724	1.864	2.156	2.410	2.562	10
12	50-24A-30	251-12-30-160	2.24	1.90	1.55	1.27	2.036	2.177	2.469	2.723	2.875	12
15	50-30A-30	251-15-30-160	2.65	2.15	1.85	1.53	2.504	2.645	2.937	3.191	3.343	15
18	50-36A-30	251-18-30-160	3.04	2.48	2.12	1.75	2.972	3.114	3.406	3.660	3.812	18
22	50-44A-30	251-22-30-160	3.57	2.93	2.50	2.06	3.596	3.739	4.031	4.285	4.437	22
25	50-50A-30	251-25-30-160	4.25	3.47	2.96	2.46	4.067	4.208	4.500	4.754	4.906	25

*Includes Variable Gold Adder

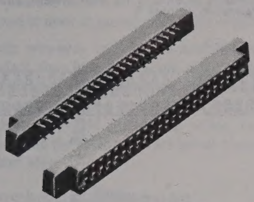
POLARIZING KEYS

PART NO.	KEY TYPE	FACTORY NO.	EACH 1-24	25-49	50-99	100-249
50-PK-1	IN-CONTACT	474-11-54-200	.070	.055	.050	.041
50-PK-2	BETWEEN CONTACT	456-07-35-003	.070	.055	.050	.041

CINCH CONNECTORS

STANDARD DIP SOLDER PC CONNECTORS .156 CENTER SPACING

STANDARD EDGE CONNECTORS WITH DIP SOLDER CONTACTS/ .156" SPACING - SINGLE OR DOUBLE READOUT FOR 1/16" PRINTED CIRCUIT BOARDS



FEATURES AND SPECIFICATIONS

SPECIAL FEATURES. Patented bifurcated bellows contacts Pat. No. 374532 provide added contact reliability especially in applications where vibration and board irregularities are involved.

SIZES: Both single and double readout versions are available in 6, 10, 12, 15, 18, 20, 22 and 25-contact position sizes.

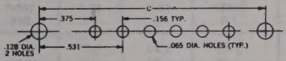
TERMINATIONS: Bifurcated contacts with tails designed for dip soldering 5/32" long. Other lengths available on special order.

MOUNTING STYLE: Plain .128" diameter holes for standard mounting.

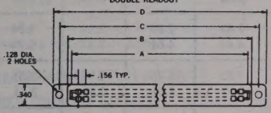
INSULATOR MATERIAL: Green glass-filled diallyl phthalate, type SDG-F per MIL-M-14.

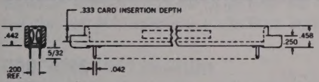
CONTACT MATERIALS & PLATING: Contacts are available in either phosphor bronze or beryllium copper. Standard finish is 30 micro-inches gold. Connectors can also be supplied with a contact finish of 50 micro-inches gold to meet MIL-C-21097B.

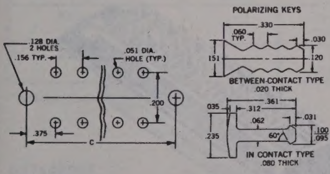
POLARIZING KEY MATERIALS: Two types of polarizing keys are available, and must be ordered separately as follows: Part No. 456-07-35-003 (for between-contact polarization) is made of glass epoxy; Part No. 474-11-54-200 (for in-contact polarization) is made of diallyl phthalate.



DOUBLE READOUT



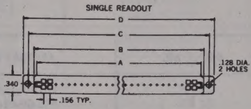


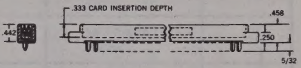


DIMENSIONAL DATA

SIZE (No. of Contact Positions)	DIMENSIONS			
	"A"	"B"	"C"	"D"
6	1.100	1.239	1.531	1.785
10	1.724	1.864	2.156	2.410
12	2.036	2.177	2.469	2.723
15	2.504	2.645	2.937	3.191
18	2.972	3.114	3.406	3.660
20	3.286	3.427	3.719	3.973
22	3.596	3.739	4.031	4.285
25	4.067	4.208	4.500	4.754

SINGLE READOUT





SINGLE READOUT

NO. OF CONTACT POSITIONS	CINCH PART NO.	FACTORY PART NO.	EACH* 1-24	25-* 49	50-* 99	100-* 249	NO. OF CONTACT POSITIONS
6	50- 6B-10	252-06-30-240	1.46	1.18	1.02	.82	6
10	50-10B-10	252-10-30-240	1.98	1.62	1.36	1.14	10
15	50-15B-10	252-15-30-240	2.65	2.15	1.85	1.53	15
18	50-18B-10	252-18-30-240	3.04	2.48	2.12	1.75	18
22	50-22B-10	252-22-30-240	3.57	2.93	2.50	2.06	22
25	50-25B-10	252-25-30-240	4.25	3.47	2.96	2.46	25

DOUBLE READOUT

NO. OF CONTACT POSITIONS	CINCH PART NO.	FACTORY PART NO.	EACH* 1-24	25-* 49	50-* 99	100-* 249	NO. OF CONTACT POSITIONS
6	50-12B-10	252-06-30-160	1.46	1.18	1.02	.82	6
10	50-20B-10	252-10-30-160	1.98	1.62	1.36	1.14	10
12	50-24B-10	252-12-30-160	2.24	1.90	1.55	1.27	12
15	50-30B-10	252-15-30-160	2.65	2.15	1.85	1.53	15
18	50-36B-10	252-18-30-160	3.04	2.48	2.12	1.75	18
22	50-44B-10	252-22-30-160	3.57	2.93	2.50	2.06	22
25	50-50B-10	252-25-30-160	4.25	3.47	2.96	2.46	25

*Includes Variable Gold Adder

CINCH CONNECTORS

ORIGINAL D CONNECTORS

GENERAL INFORMATION

The Cinch Original D Plug utilizes a two-piece nylon insulator housed in a variety of five basic shell sizes: E, A, B, C, and D. These shell sizes contain 9, 15, 25, 37, and 50 #20 solder pot contacts respectively. Standard contact terminations accommodate up to #20 AWG stranded wire. Current rating is 5 amperes.*

The keystone shape of the shell assures proper polarization. Coupling is by means of friction; locking accessories are available. Also available are shells with float mounts. Connectors wit #4-40 or #2-56 clinch nut mounts may be provided.

With standard nylon insulators, operating temperatures rang from −65°F to +250°F (the limiting factor being the insulato material). When diallyl phthalate insulator is substituted, th operating temperature range is from −65°F to +275°F.

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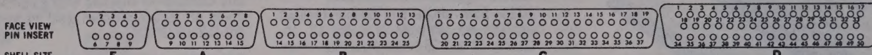
*Military rating of #20 contacts or wires is 1.5 amps average, and 7. amps maximum. See explanation on page 4.

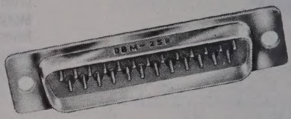
BASIC CONTACT ARRANGEMENTS (Applicable to all Series)



SHELL SIZE	E	A	B	C	D
NO. OF CONTACTS	9	15	25	37	50
CONTACT SIZE	#20	#20	#20	#20	#20

ORDERING INFORMATION

STANDARD MOUNT

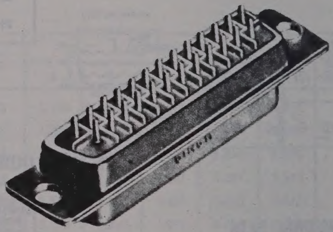


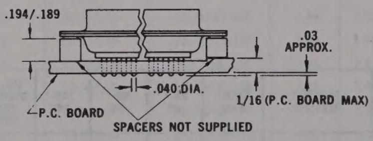
SHELL SIZE	LAYOUT	ORDER NO.	FACTORY NO.	EACH* 1-9	10-* 49	50-* 99	100-* 249
E	9 Contact Plug Socket	DE-9P DE-9S	231-09-11-101 230-09-11-101	1.36 1.97	1.22 1.77	1.05 1.49	.83 1.20
A	15 Contact Plug Socket	DA-15P DA-15S	231-15-11-101 230-15-11-101	1.93 2.88	1.75 2.61	1.48 2.19	1.19 1.77
B	25 Contact Plug Socket	DB-25P DB-25S	231-25-11-101 230-25-11-112	2.83 4.43	2.64 4.01	2.19 3.37	1.74 2.74
C	37 Contact Plug Socket	DC-37P DC-37S	231-37-11-101 230-37-11-112	3.85 5.03	3.48 4.54	2.92 3.81	2.38 3.11
D	50 Contact Plug Socket	DD-50P DD-50S	231-50-11-101 230-50-11-101	8.30	7.51	6.33	5.12

*Includes Variable Gold Adder

PRINTED CIRCUIT TERMINALS

Straight terminals for printed circuit boards up to and including 1/16″ maximum thickness. Terminals extend 3/32″ beyond the rear of the insert. For greater board thicknesses consult factory.





ORDERING INFORMATION

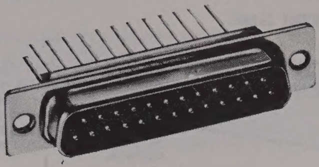
SHELL SIZE	LAYOUT	ORDER NO.	FACTORY NO.	EACH* 1-9	10-* 49	50-* 99	100-* 249
A	15 Contact Plug Socket	DA-15PV DA-15SV	231-15-12-121 230-15-12-131	2.86 4.14	2.58 3.74	2.33 3.32	2.06 2.91
B	25 Contact Plug Socket	DB-25PV DB-25SV	231-25-12-116 230-25-12-105	6.36 9.14	5.74 8.25	4.81 6.93	3.88 5.57

*Includes Variable Gold Adder

CINCH CONNECTORS

WIRE WRAP TERMINALS

RACK AND PANEL CONNECTORS WITH 0.025″ SQUARE WIRE WRAP* TAILS



Cinch D-Subminiature Connectors are designed for applications where space and weight considerations are prime considerations. These high contact density connectors are especially well-suited for aircraft, missile and ground support installations. They are designed to meet or exceed most of the requirements of MIL-C-24308.

These wire-wrap versions are available in 9, 15, 25, 37 and 50 contact sizes in both plug and socket types. Two tail lengths are available: $\frac{3}{8}$″ long to accommodate two wires, and $\frac{37}{64}$″ long to accommodate three wires. Socket contacts and plug pins are copper alloy gold plated over silver. Insulators are two-piece nylon, and the outer shells are yellow chromate finished, cadmium-plated steel.

These D-Subminiature Connectors will intermate with any other D-Subminiature Connector of the same insert configuration. Mating connectors with standard termination may be adapted for cable attachment by means of accessory junction shells with integral clamps.

*Trademark Gardner-Denver Corp.

ORDERING INFORMATION

LAYOUT	SHELL SIZE	$\frac{3}{8}$″ TAIL LENGTH**		EACH* 1-9	10-* 49	50-* 99	100-* 249
		ORDER NO.	FACTORY NO.				
9 Contact Plug Socket	E	DE-9P-F179 DE-9S-F179	231-09-13-133 230-09-13-132	2.19 3.94	1.78 3.15	1.55 2.63	1.37 2.11
15 Contact Plug Socket	A	DA-15P-F179 DA-15S-F179	231-15-13-152 230-15-13-142	2.85 5.41	2.27 4.32	2.01 3.61	1.80 2.90
25 Contact Plug Socket	B	DB-25P-F179 DB-25S-F179	231-25-13-157 230-25-13-149	4.48 6.37	3.59 5.15	3.12 4.53	2.62 4.06
37 Contact Plug Socket	C	DC-37P-F179 DC-37S-F179	231-37-13-141 230-37-13-131	6.12 8.43	4.90 6.79	4.33 6.47	3.76 6.15
50 Contact Plug Socket	D	DD-50P-F179 DD-50S-F179	231-50-13-136 230-50-13-124	7.29 11.12	5.85 8.93	5.17 8.50	4.68 8.03

*Includes Variable Gold Adder

DATAPHONE CONNECTORS

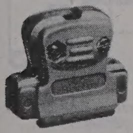
Cinch Dataphone Connectors are specifically designed to meet the exacting long life requirements of telephone type equipment. Two sizes are available, 15 contact and 25 contact. While dimensionally equivalent to original D 15 and 25 pin plugs and sockets, superior materials and finishes provide a significant increase in performance as compared to the standard original D versions. While these are basically rack and panel connectors an easy conversion to cable to chassis types is possible with the addition of the special dataphone hoods (backshells) shown below.

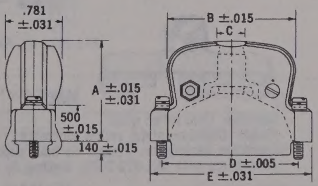
ORDERING INFORMATION

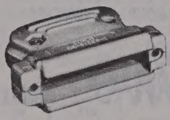
LAYOUT	SHELL SIZE	ORDER NO.	FACTORY NO.	EACH* 1-9	10-* 49	50-* 99	100-* 249
15 Contact Plug Socket	A	DA-19603-403 DA-19603-404	231-15-61-133 230-15-61-099	3.11 6.94	2.92 6.38	2.64 5.87	2.37 5.26
25 Contact Plug Socket	B	DB-19604-432 DB-19604-433	231-25-61-125 230-25-61-099	4.33 10.89	4.05 9.99	3.66 9.12	3.25 8.24

*Includes Variable Gold Adder

DATAPHONE HOODS







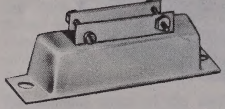
Material: Grey Melamine.
Finish: None.
Corrosion Resistance: Hardware passes 48 hour exposure to salt spray in accordance with MIL-STD-202D, Method 101C, Condition B.

ORDER NO. BY SHELL SIZE	FACTORY NO.	A	B	C	D	EACH 1-9	10-49	50-99	100-249
DA-51225-1 DB-51226-1	239-13-99-069 239-13-99-070	$1\frac{41}{64}$ $2\frac{13}{64}$	$1\frac{19}{64}$ $1\frac{13}{32}$	1.312 1.852	$1\frac{7}{32}$ $1\frac{51}{64}$	1.50 1.66	1.35 1.40	1.08 1.11	.99 1.02

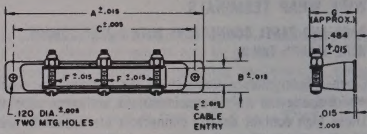
CINCH CONNECTORS

ACCESSORIES JUNCTION SHELLS

19678 STRAIGHT CLAMP

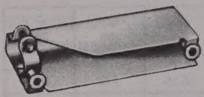


Material: Low carbon steel.
Finish: Cadmium plate, yellow chromate.
Corrosion Resistance: Passes 48 hour exposure to salt spray in accordance with MIL-STD-202D, Method 101C, Condition B.
All tolerances are ±.010 unless noted otherwise.

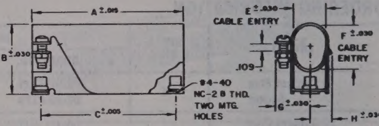


ORDER NUMBER BY SHELL SIZE	NO. OF CABLE LOCKING SCREWS REQUIRED	A	B	C	E	F	G	EACH 1-9	10-49	50-99	100-249
DA-19678-1	2	1.531	.500	1.312	.296	.312	.640	1.15	1.05	.87	.70
DB-19678-2	2	2.078	.500	1.852	.296	.796	.640	1.37	1.23	1.04	.82
DC-19678-3	3	2.718	.500	2.500	.296	.687	.640	1.63	1.47	1.23	.98
DD-19678-4	3	2.625	.609	2.406	.390	.687	.703	1.79	1.61	1.33	1.07

19977 RIGHT ANGLE CLAMP

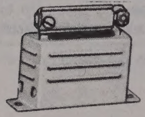


Material: Low carbon steel.
Finish: Cadmium plate, yellow chromate.
Corrosion Resistance: Passes 48 hour exposure to salt spray in accordance with MIL-STD-202D, Method 101C, Condition B.

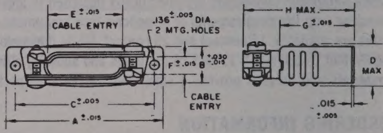


ORDER NUMBER BY SHELL SIZE	A	B	C	E	F	G	H	EACH 1-9	10-49	50-99	100-249
DE-19977-5	1.203	.718	.984	.437	.437	.468	.281	1.92	1.73	1.45	1.14
DA-19977-1	1.531	.718	1.312	.437	.437	.468	.281	1.50	1.35	1.12	.90
DB-19977-2	2.078	.968	1.852	.437	.625	.468	.281	1.65	1.49	1.25	.99
DC-19977-3	2.718	1.187	2.500	.437	.812	.468	.281	1.75	1.57	1.31	1.05
DD-19977-4	2.625	1.250	2.406	.562	.906	.531	.343	1.90	1.70	1.42	1.13

DEEP, STRAIGHT CLAMP

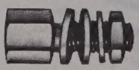


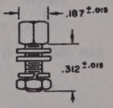
Material: Low carbon steel.
Finish: Cadmium plate, yellow chromate.
Corrosion Resistance: Passes 48 hour exposure to salt spray in accordance with MIL-STD-202D, Method 101C, Condition B.



ORDER NUMBER BY SHELL SIZE	A	B	C	D	E	F	G	H	EACH 1-9	10-49	50-99	100-249
DE-24657	1.203	.484	.984	.578	.375	.375	.750	1.219	2.15	1.98	1.65	1.32
DA-24658	1.531	.484	1.312	.578	.713	.312	.750	1.250	2.12	1.96	1.62	1.29
DB-24659	2.078	.484	1.852	.578	1.000	.312	1.000	1.531	1.70	1.55	1.29	1.05
DC-24660	2.718	.484	2.500	.578	1.375	.312	1.000	1.531	1.78	1.62	1.34	1.08
DD-24661	2.625	.593	2.406	.687	1.406	.406	1.125	1.656	2.00	1.87	1.57	1.26

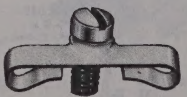
SCREW LOCK ASSEMBLIES



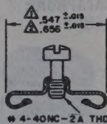


FEMALE

Material: Clip — sheet steel; hardware — cold rolled steel.
Finish: Cadmium plate, yellow chromate.
Corrosion Resistance: Passes 48 hour exposure to salt spray in accordance with MIL-STD-202D, Method 101C, Condition B.



MALE



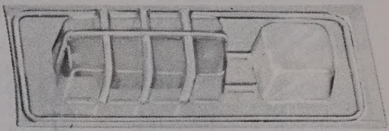
Material: Cold rolled steel.
Finish: Cadmium plate, yellow chromate.
Corrosion Resistance: Passes 48 hour exposure to salt spray in accordance with MIL-STD-202D, Method C, Condition B.

ORDER NUMBER	TYPE	USAGE	EACH 1-9	10-49	50-99	100-249
D-20418-2	Female	DE, DA, DB, DC, DD PLUG OR SOCKET WITH OR WITHOUT JUNCTION SHELL	.45	.41	.36	.28
D-20419	Male	DA, DE PLUG OR SOCKET; DB, DC SOCKET	.28	.25	.22	.18
D-20420	Male	DD SOCKET	.42	.39	.31	.26

CINCH CONNECTORS

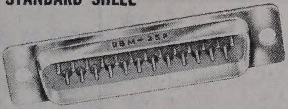
CONNECTORS INDIVIDUALLY PACKED IN HEAT-SEALED CONTAINERS TO ASSURE EXTENDED SHELF-LIFE

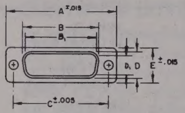
To protect D-Subminiature Connectors from contamination and other corrosive elements in the air, Cinch individually packs each connector in heat-sealed polyvinylchloride containers (as shown). This assures every customer of an extended shelf life.

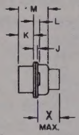


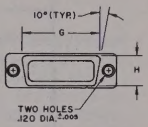
STANDARD DIMENSIONS

STANDARD SHELL







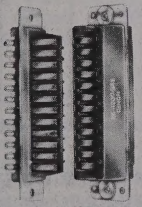


Shell Size	Connector Type	A ±.015	B ±.005	B_1 ±.005	C ±.005	D ±.005	D_1 ±.005	E ±.015	G ±.010	H ±.010	J ±.010	K ±.005	L ±.010	M ±.010	N ±.010
E	9P	1.213		.666	.984		.329	.494	.759	.422	.030	.235	.045	.422	.120
	9S	1.213	.643		.984	.311		.494	.759	.422	.030	.243	.045	.429	.120
A	15P	1.541		.994	1.312		.329	.494	1.083	.422	.030	.235	.045	.422	.120
	15S	1.541	.971		1.312	.311		.494	1.083	.422	.030	.243	.045	.429	.120
B	25P	2.088		1.534	1.852		.329	.494	1.625	.422	.039	.230	.060	.426	.129
	25S	2.088	1.511		1.852	.311		.494	1.625	.422	.030	.243	.045	.429	.120
C	37P	2.729		2.182	2.500		.329	.494	2.272	.422	.039	.230	.060	.426	.129
	37S	2.729	2.159		2.500	.311		.494	2.272	.422	.030	.243	.045	.429	.120
D	50P	2.635		2.079	2.406		.436	.605	2.178	.534	.039	.230	.060	.426	.129
	50S	2.635	2.064		2.406	.423		.605	2.178	.534	.030	.243	.045	.429	.120

B and D dimensions are the outside dimensions (for socket side).
B_1 and D_1 dimensions are the inside dimensions (for pin side).

BLUE RIBBON CONNECTORS

RACK AND PANEL PLUGS & RECEPTACLES — BARRIER POLARIZATION TYPE



26-4100-24P 26-4200-24S

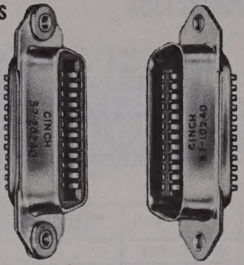
The interlocking design of these mating plug and receptacle bodies provides positive polarization equal to any other type. This barrier-type polarization makes visual alignment unnecessary since it is not dependent on contact arrangement. The float-mounted receptacle allows for possible misalignment with the mating plug. Insulator material is diallyl phthalate, type MDG per MIL-M-14F. Plug contacts are of copper, ASTM-B-152, type ETP, with a finish of .00002 gold per MIL-G-45204 type II over copper flash. Receptacle contacts are of phosphor bronze, ASTM-B-103, MIL-B-892, Grade A, with the same finish as on the plug contacts. The mounting plate, of corrosion resistant, passivated stainless steel, provides a sturdy mounting.

PART NO.	DESCRIPTION	EACH* 1-9	10-* 49	50-* 99	100-* 249
26-4100-8P	8 Pin Plug	1.27	1.09	.90	.81
26-4200-8S	8 Contact Recpt.	2.04	1.73	1.43	1.27
26-4100-16P	16 Pin Plug	2.39	2.04	1.68	1.27
26-4200-16S	16 Contact Recpt.	3.02	2.57	2.11	1.91
26-4100-24P	24 Pin Plug	2.94	2.51	2.08	1.89
26-4200-24S	24 Contact Recpt.	3.61	3.08	2.53	2.30
26-4100-32P	32 Pin Plug	3.45	2.95	2.44	2.24
26-4200-32S	32 Contact Recpt.	4.34	3.69	3.05	2.77

*Includes Variable Gold Adder

CINCH CONNECTORS

RACK AND PANEL PLUGS & RECEPTACLES

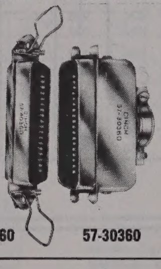


Miniaturized rack and panel connectors utilizing “ri
bon” contact feature. Smooth, easy insertion/extracti
action plus the double-sided, self-cleaning, flexi
action of both mating contact members provide add
reliability. Shell-type polarization and float-mount
receptacle assure proper alignment. Insulator materi
is diallyl phthalate, type MDG per MIL-M-14F. Pl
and receptacle contacts are of cadmium bronze, AST
B-105, with a finish of .00002 gold per MIL-G-452
type II over copper flash. Shells are brass, ASTM-B-
Alloy 6, with a finish of .0002 to .0004 zinc. Pretinni
wires before soldering is recommended. 14, 24,
and 50-contact sizes are available.

PART NO.	DESCRIPTION	EACH* 1-9	10-* 49	50-* 99	100-* 249
57-10140	14 Pin Plug	2.17	1.83	1.50	1.38
57-20140	14 Contact Recpt.	2.23	1.89	1.53	1.41
57-10240	24 Pin Plug	2.93	2.49	2.16	1.84
57-20240	24 Contact Recpt.	2.99	2.54	2.09	1.86
57-10360	36 Pin Plug	3.39	2.89	2.37	2.15
57-20360	36 Contact Recpt.	3.47	2.95	2.42	2.21
57-10500	50 Pin Plug	4.48	3.82	3.13	2.82
57-20500	50 Contact Recpt.	4.52	3.86	2.17	2.87

*Includes Variable Gold Adder

CABLE TO CHASSIS PLUGS & RECEPTACLES



57-40360 57-30360

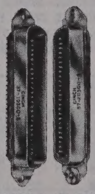
Miniaturized connectors with same basic features
those shown on above except plug is equipped w
hood and cable clamp while receptacle has stu
spring-type latches which are guided and held by c
outs in plug hood flanges. Insulator body is molded
diallyl phthalate, type MDG per MIL-M-14F. Plug a
receptacle contacts are cadmium bronze, ASTM-B-1
with a finish of .00002 gold per MIL-G-45204 type
over copper flash. Shells are brass, ASTM-B-36 Alloy
with a finish of .0002 to .0004 zinc. Pretinning wi
before soldering is recommended. 14, 24, 36 and
contact sizes are available.

PART NO.	DESCRIPTION	EACH* 1-9	10-* 49	50-* 99	100-* 249
57-30140	14 Pin Cable Plug	4.11	3.46	2.82	2.54
57-40140	14 Contact Chassis Recpt.	2.72	2.30	1.89	1.70
57-30240	24 Pin Cable Plug	4.56	3.84	3.13	2.83
57-40240	24 Contact Chassis Recpt.	3.28	2.77	2.28	2.08
57-30360	36 Pin Cable Plug	5.60	4.75	3.87	3.48
57-40360	36 Contact Chassis Recpt.	3.59	3.05	2.50	2.26
57-30500	50 Pin Cable Plug	6.18	5.24	4.31	3.88
57-40500	50 Contact Chassis Recpt.	4.70	3.99	3.27	2.96

*Includes Variable Gold Adder

SPECIAL “HIGH-BARRIER” RACK AND PANEL PLUG & RECEPTACLE

Available in 50-contact size only. Same as 50-contact rack and panel connector shown on page 5, except for a special “high barrier” (additional insulator material) interposed between opposite rows of contacts.



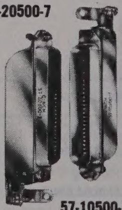
57-10500-6 57-20500-6

		EACH* 1-9	10-* 49	50-* 99	100-* 249
57-10500-6	Plug.	4.60	3.94	3.25	2.94
57-20500-6	Recpt.	4.80	4.11	3.41	3.08

*Includes Variable Gold Adder

SPECIAL “HIGH-BARRIER” CABLE-TO-CABLE PLUG & RECEPTACLE

57-20500-7



57-10500-7

Same as 50-contact rack and panel connector sho
above except for special hood and hardware for ca
to-cable applications. Plug and receptacle have sa
special “high barrier” of insulator material interpo
between opposite rows of contacts.

		EACH* 1-9	10-* 49	50-* 99	100- 249
57-10500-7	Plug.	5.14	4.40	3.61	3.22
57-20500-7	Recpt.	5.39	4.62	3.80	3.41

*Includes Variable Gold Adder

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MANUFACTURER'S IDENTIFYING PREFIX NUMBERS

To avoid confusion, and to facilitate filling orders, we list all merchandise under the manufacturers’ number, with a prefix number to identify the manufacturer. A complete list of these numbers is given low for identification of manufacturers.

Code	Manufacturer
001	Amphenol
002	Belden
003	Cornell-Dublier
005	TRW-IRC
006	Bud
008	Bogen
009	Shurite
014	Cinch-Jones
020	Burgess Battery
021	Clarostat
024	Shure
026	Kurz-Kasch
027	Superior Electric
029	Simpson
031	RCA
032	Stancor
040	Waldom
041	Mueller
042	Littelfuse
044	General Electric
046	Electro-Voice
047	Mallory
055	Ohmite
058	Greenlee
059	GC Electronics
060	Electrons Inc.
067	Ungar
071	E.F. Johnson
072	Motorola
075	Xcelite
076	General Hardware
081	Atlas Sound
086	GTE/Sylvania
090	Potter & Brumfield
092	Weller Mfg.
093	Kester
095	Ersin-Multicore
107	Sola Electric
111	EIMAC
116	Keystone
117	Triplett
122	University Sound
124	Birnbach
138	JBT
153	Westinghouse
159	Guardian Electric
165	Centralab
168	Union Steel Chest
183	Bussman
222	Minn. Mining & Mfg.
223	Switchcraft
232	Raytheon
235	National Electronics
239	Akro Mils
240	Krylon
242	Smith, Herman H.
245	Vector
276	Terado
277	Turner
291	Sprague
301	Grayhill
313	Talk-A-Phone
316	International Rectifier
317	Industrial Timer
319	Alpha Wire
322	Triad
325	Miller
347	Telvac
349	Pomona Electronics
353	Tungsol
356	Mullard
360	CTS
363	Leecraft Mfg.
366	Adel Tool Co.
371	Hunter
381	Pamotor
382	Dumont
383	Amperex
385	Thermosen
391	Waber
411	Topaz Inc.
416	LPS
431	Clauss
444	Sencore
448	ALCO
460	Staco
461	Dynascan (B&
506	Engler Instrum Co.
522	Davis & Sanfor
573	Panasonic Vide Products
700	Banner Engineering C
750	Metal Film Resistors
766	Carbon Resisto

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L—Lima Radio Index
G—General Index
X—Stocked, not cataloged ask for more detailed information

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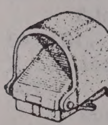
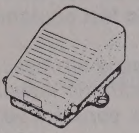
FOOT SWITCHES

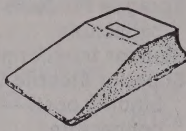

Sr. W/Guard


Senior

Treadlite

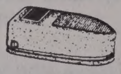
Duplex

Clipper


Junior

Executive

Compact


Nautilus

LINEMASTER FOOT SWITCHES

For convenience in operating power tools, photographic equipment, etc., Model 491-S2, Executive Models B-2-S and B-4-S, Duplex & Lekto-Lok models are dual units. *Momentary contact. **Maintained contact. †Equipped with 6-foot power cord and 2-prong series plug. ‡For dark-room use, has glow-lamp with diffused light lens. Other foot switches available in heavy duty types. Ask for complete catalog.

SENIOR. 7" x 4" x 3-1/4"

Cat. No.	Contacts	Current Rating	Net Ea.
311-4141-S	DP-ST*	20 a. ac/dc @ 125/250 v.	**$12.00**
311-4141-D	DP-ST**	20 a. ac/dc @ 125/250 v.	**12.00**
311-Safety	Safety guard for Senior foot switches		**8.50**

CLIPPER. 4-1/2" x 3-1/2" x 1-1/2"

311-632-S	SP-DT*	20 a. ac @ 125/250 v.	**$ 8.50**
311-632-D	SP-DT**	20 a. ac @ 125/250 v.	**11.25**

COMPACT. 2-7/8" x 2-1/2" x 1-1/8"

311-491-S	SP-DT*	10 a. @ 125 v-ac	**$8.85**
311-491-SC†	SP-DT*	10 a. @ 125 v-ac	**5.55**
311-492-S	SP-DT*	20 a. @ 125/250 v-ac	**3.80**

TREADLITE. 3-1/2" x 2-5/8" x 1"

311-T-51-S	SP-DT*	7 a. @ 125/250 v-ac	**$2.95**
311-T-51-D	SP-DT**	7 a. @ 125/250 v-ac	**4.00**
311-T-51-SC	SP-DT†	7 a. @ 125/250 v-ac	**4.40**

NAUTILUS. 8" x 4" x 2-1/4"

WATERPROOF–OILPROOF–RUSTPROOF–DUSTPROOF

Cat. No.	Contacts	Current Rating	Net Ea.
311-WP-541-S	SP-DT*	20 a. @ 125/250 v-ac	**$49.50**
311-WP-541-D	SP-DT**	12 a. @ 125 v., 6 a. @ 250 v-ac	**49.50**

JUNIOR. 5-1/2" x 3-1/4" x 1-1/4"

311-121-S	SP-DT*	15 a. @ 125/250 v-ac	**$8.70**

EXECUTIVE. 4-5/8" x 4" x 1-1/8"

311-B-2-S	2 SP-DT*	15 a. @ 125/250 v-ac	**$ 7.50**
311-B-4-S	2 DP-DT*	10 a. @ 125, 5 a. @ 250 v-ac	**12.70**

CADET. 3-5/8" DIA. x 1-1/8"

311-HB-2†	SP-DT*	7 a. @ 125 v-ac	**$5.55**

DUPLEX 8½" x 3½" x 2"

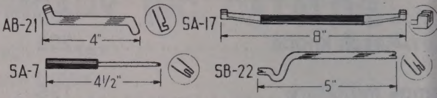
Model 475-S has heavy spring for standing operation. Model 476-S has light spring for seated operation. §Each side.

311-476-S	SPDT§*	10A @ 125v-ac, 5A @ 250v-ac	**$14.00**

LEKTRO-LOK 5" x 2½" x 1-1/8"

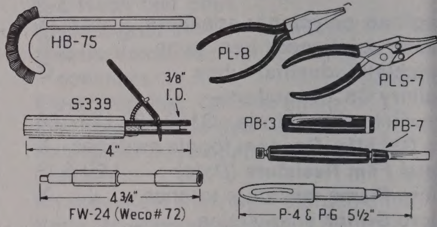
311-L-2-S	SPDT§*	15A @ 125-250v-ac	**$ 5.90**
311-L-4-S	DPDT§*	10A @ 125v-ac, 5A @ 250v-ac	**11.00**

JONARD RELAY TOOL

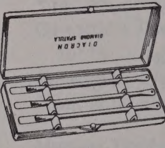


Specially designed tools for every necessary function in the a
justment of relays and other spring loaded devices for optimu
performance. Those listed here are only a few of the many too
which are available. Request a JONARD catalog for complete lis

Cat.	Description	N
430-AB21	Arm bender, oblique slots .120" x .045" deep	**$2.0**
430-SA-17	Contact spring adjuster, .023" slots	**4.9**
430-SA-7	Spring adjuster, end slot .015"	**1.9**
430-SB-22	Back stop adjuster, end slot .033" wide	**2.1**



Cat.	Weco#	Description	N
430-P-4	....	Penfile, 12¼" x 1¼" blades	**$4.5**
430-RB-4	....	25 blades for P-4	**4.5**
430-P-6	....	Penfile, 12-3/16" x 1¾" blades	**4.5**
430-RB-6	....	25 blades for P-6	**4.5**
430-S-339	553A	3/8" switchboard lamp extractor	**2.9**
430-FW-24	72	7/32" & ¼" hex. nut/screwdriver	**3.9**
430-PL-8	....	Duck bill 5½" pliers	**6.9**
430-PLS-7	308	Parallel duck bill 6" pliers	**9.1**
430-PB-3	....	Pocket burnisher, 6 .0035" blades	**4.9**
430-B-3	266E	25 blades for PB-3	**4.8**
430-PB-7	....	Pocket burnisher, 6 .007" blades	**4.8**
430-B-7	....	25 blades for PB-7	**4.5**
430-HB-75	389A	Rotary selector switch brush	**2.7**
430-K-60	....	Aerosol spray contact cleaner	**2.3**



DIAMOND FACED CONTACT CLEANING SPATULAS

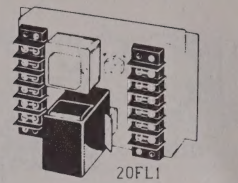
Spatula has abrasive diamond particle
for precise effective cleaning of re
lay contacts with minimum pressure
Nominal removal of material will no
alter normal contact gap. Flexible di
electric shaft permits access to awkward areas. Diamond faces ar
1" x .25". Overall spatula length 6".

Cat. 430-D-200	Coarse, .019" thick, two faces	**Net $5.8**
Cat. 430-D-300	Medium, .017" thick, two faces	**Net $5.8**
Cat. 430-D-400	Fine, .011" thick, one face	**Net $5.8**
Cat. 430-K-234	Diamfile Kit, one of each above	**Net $17.0**

SEE LOCATION GUIDE
FOR OTHER LISTINGS OF
SWITCHES - RELAYS - TOOLS
LIMA RADIO PARTS CO.
CAN SUPPLY

A-H & H ALCO CENTRALAB
CUTLER HAMMER MALLORY
JBT MICRO SWITCH
McGILL SWITCHCRAFT
AMPERITE AUTOTRON
EAGLE SIGNAL GUARDIAN
INDUSTRIAL TIMER
POTTER BRUMFIELD
KLEIN - XCELITE - HUNTER

MICRO SWITCH



PROXIMITY SWITCHES
AA-METALS SENSITIVE SYSTEMS

These switches are non-magnetic, resist the effects of vibration and shock, and respond to the roximity of electro-conductive metals such as aluminum, steel, iron, brass, copper, zinc, nickel, old, silver, titanium, magnesium, platinum, mercury, etc. They are not influenced by the proxinity of non-metallic materials. Operating temperature range +32°F. to +150°F. Sensors are suplied with a 3-wire, 6-foot #16 PVC jacketed lead wire. Longer lengths are available on order.

GENERAL PURPOSE SENSOR

'or use where a small, compact design is required. The sensing field ncludes some area to both the sides and rear of the sensing face. The active portion is .800" in diameter. Normal proximity sensiivity is .750".

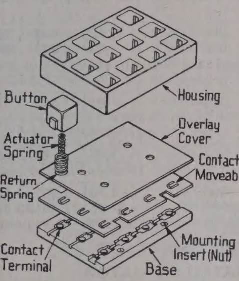
Cat. 173-6FS1 General Purpose Sensor **Net $20.90**

ONE SENSOR SYSTEM

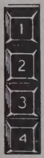
Reacts in 20 milli-seconds to metals entering the proximity detection range, releases in 30 milliseconds. Amplifier operates a built-in double-throw relay rated for 5 amps at 115 v-ac 60 Hz. Both fine and coarse sensitivity controls. For 105-130 v-ac, 50/60 Hz.

Cat. 173-60FL1 Amplifier, Less Sensor **Net $97.90**

MICRO SWITCH
NW KEYBOARDS



Designed for high reliability and long life. Low profile design conserves valuable behind panel space. Variety in format is available in adding machine, Touch-Tone†, or an array to suit your particular needs. NW Keyboards are ideal for desk-top calculators, point-of-sale stations, credit verification equipment and other business machine applications.



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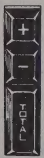

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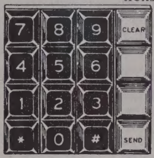

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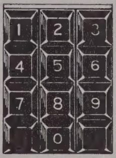

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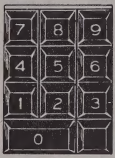

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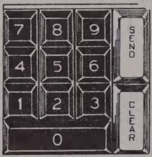
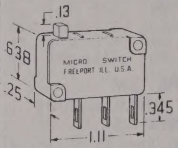


F

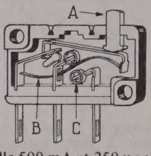
Iousing are black self-xtinguishing thermo-plastic. Numbered ush-buttons are grey vith white figures. 'ush-buttons with legnds are white with lack letters. Buttons re .500" square. ingle strip versions Fig. A & B) are 2.99" igh, .740" wide and .515"deep. Fig. D & measure 2.99" high, .24" wide x1.515"deep. Fig. C and F are 2.99" high x 2.99" wide 1.515"D. Slow make, slow break contacts are rated 6 to 20 mA t 4 to 12 v-dc. Button pre-travel .060" nominal, total travel .150".

Cat. No.	See Fig.	Description	Ea. 1-24	25-99	100-499	500-999
73-4NW7-1	A	4 Buttons	$5.40	$4.91	$4.43	$3.94
73-4NW7-2	B	3 Buttons	5.40	4.91	4.43	3.94
73-16NW7-1	C	16 Buttons	14.40	13.10	11.81	10.51
73-12NW7-1	D	12 Buttons	11.50	10.47	9.43	8.40
73-12NW7-2	E	11 Buttons	11.50	10.47	9.43	8.40
73-16NW7-2	F	12 Buttons	14.40	13.10	11.81	10.51



MICRO SWITCH
NEW MODEL SV
MINIATURE SWITCH

ROLLING WAVE SPRING

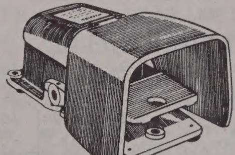


New design incorporates a rolling wave spring which requires less operating force, and occupies less space. Typical dimensions are shown at the left. In the illustration at the right A is the operating plunger, B is the rolling wave spring, and C is the back contact. Contacts are gold plated, will handle 500 mA at 250 v-ac maximum, or 12 Va max. inrush or resistive loads. Operating force 18 grams max., release force 5 grams min. Pretravel .050" max., overtravel .050" min. Differential travel .030" max.

Cat. No.	Switch Action	Ea. 1-9	10-19	20-49	50-99	100-499
173-1SV1	SP-DT	$1.75	$1.58	$1.40	$1.22	$1.04

LINEMASTER

*COMFORMS TO O.S.H.A.



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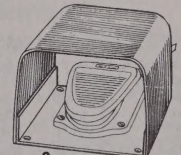


2

ANTI-TRIP FOOT CONTROL
ADVANCED DESIGN PREVENTS ACCIDENTAL ACTUATION

New heavy duty foot switch (Fig. 1) features an anti-trip treadle mechanism that prevents accidental actuation through unintentional stepping on foot treadle. Will withstand sudden shock force from kicking or dropping. Tested for 3 foot drops on cement floor without actuation of switch contacts. Switch operation requires that the latch trip lever be released prior to depressing the foot treadle. Smooth trip lever release and treadle depression motion results in good rate of operation. Comes with anti skid rubber feet nd 3 holes for rigid mounting to floor or equipment, ¾"-14 pipe thread conduit opening, non-adjustable interior switch(es), and dual nechanisms and springs for treadle return and latching. Watertight, oiltight to NEMA type 4. Painted alert orange. Weight-approx. 7 lbs. Dimensions: 9" x 5¾" x 4¾". Electrical ratings: 20 A. @ 125-250 VAC, 1H.P. 125-250 VAC., heavy pilot duty 250 VAC. max.

Cat. 311-511-B SPDT **Net $32.00** | **Cat. 311-511-B2** DPDT **Net $35.00**

FULL-GUARD SAFETY
ESPECIALLY DESIGNED FOR EASY FIELD INSTALLATION

Complete with mounting hardware, instructions, and pre-drilled to accept Clopper and Compact electric foot switch models and Clopper AirVal (foot operated air valve). Fig. 2. Can be factory adapted for use with other Linemaster models for O.E.M. applications. Constructed of heavy duty 12 gauge steel with full non-skid base pad and four mounting holes for rigid mounting to floor or equipment. Painted lert orange. Weight-approx. 4 lbs. Dimensions: 6" x 6" x 4½". Full Twin Guard also available, same as above but for two foot controls.

Cat. 311-522-B11 Clipper Guard **Net $6.00** | **Cat. 311-522-B12** Clipper Twin Guard **Net $11.50**

MICRO SWITCH®

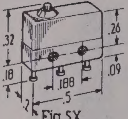
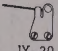
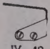
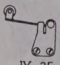


Fig. SX


JX-20


JX-40


JX-25

JX-45

TYPE "SX"
BASIC SP-DT SUBMINIATURE SWITCHES

Weight only 1/28 oz. Silver or gold contacts. UL and CSA listed. Silver contacts are rated for 7 amps resistive load at 28 v-dc, or 4 amps ind. load at 28 v-dc, or 7 amps at 115/230 v-ac, 15 amps inrush. Gold contacts rated 1 amp resistive load, or 0.5 amp ind. load at 28 v-dc, inrush 2 amps. *Military MS24547-1.

Cat. No.	Op. Force	Description	Ea. 1-9	10-19	20-49	50-99
173-1SX1-T*	5 oz.	General use	$2.35	$2.12	$1.88	$1.65
173-2SX1-T	3 oz.	Low force	2.90	2.61	2.32	2.03
173-1SX12-T	5 oz.	Low dif. travel	3.25	2.93	2.60	2.28
173-3SX1-T	5 oz.	Gold contacts	3.35	3.02	2.68	2.35
173-JX-20		Lever actuator	.92	.83	.74	.64
173-JX-25		Roller lever	1.80	1.62	1.44	1.26
173-JX-40		Leaf actuator	.30	.27	.24	.21
173-JX-45		Roller leaf	.85	.77	.68	.60

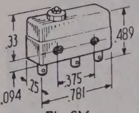


Fig. SM

TYPE "SM"
BASIC SP-DT SUBMINIATURE SWITCHES

†Silver contacts UL listed for 5 amps at 125/250 v-ac, or 28 v-dc, 3 amps ind. load, 5 amps res. load. ‡Rated for 11 amps at 125/250 v-ac, or ¼ hp at 125/250 v-ac. §Gold contacts for low energy circuits. Rating at 30 v-dc is 0.5 amp ind. load, 1 amp res. load Max. inrush 2 amps. *Military MS25085-1. ††Op. force in ounces.

Cat. No.	Op.†† Force	Description	Ea. 1-9	10-19	20-49	50-99
173-1SM1*	3-5	General use	$1.25	$1.13	$1.00	$0.88
173-11SM1	3-5	Extra long life†	1.25	1.13	1.00	.88
173-11SM401	3-5	Low dif. travel†	2.50	2.25	2.00	1.75
173-41SM1-T	3-5	10 amp contacts‡	1.45	1.31	1.16	1.02
173-1SM23	3-5	Long shelf Life§	2.35	2.12	1.88	1.65
173-11SM23	3-5	Extra long life§	2.35	2.12	1.88	1.65
173-12SM4	3-5	Hi-reliability§	3.85	3.47	3.08	2.70

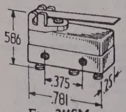
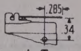
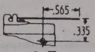


Fig. 311SM



1-T



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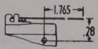

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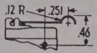

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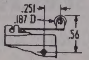
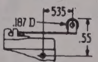


6-T

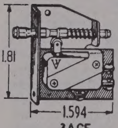


7-T

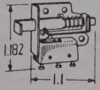
TYPE "311SM" LEVER SWITCHES

Subminiature SP-DT switches with integral lever actuators. UL and CSA listed: 5 amps, 125 and 250 v-ac; 3 amps, 30 v-dc inductive; 5 amps, 30 v-dc resistive load. Max. inrush 25 amps.

Cat. No.	Lever Fig.	Op. Force	Dif. Trav.	Ea. 1-9	10-19	20-49	50-99
173-311SM1-T	1-T	40 gr.	.019"	$1.35	$1.22	$1.08	$0.95
173-311SM2-T	2-T	30 gr.	.027"	1.35	1.22	1.08	.95
173-311SM3-T	3-T	15 gr.	.077"	1.35	1.22	1.08	.95
173-311SM4-T	4-T	40 gr.	.019"	1.45	1.31	1.16	1.02
173-311SM6-T	6-T	40 gr.	.019"	1.60	1.44	1.28	1.12
173-311SM7-T	7-T	30 gr.	.027"	1.60	1.44	1.28	1.12



3AC5

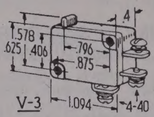


17AC1-T

DOOR INTERLOCK SWITCHES

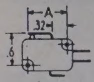
For use on hazardous equipment cabinets to cut off power when the service door is opened. A spring-loaded plunger trips a snap-action switch when door is opened. The plunger on 3AC5 may be pulled out farther to keep power on for circuit checks. When door is closed plunger returns to its normal safety position. Type 3AC5 incorporates a "V3" switch; Type 17AC1-T an "SM" switch. UL and CSA listed for 125 and 250 v-ac.

Cat. No.	Contact Rating	Ea. 1-9	10-19	20-49	50-99
173-3AC5	SP-DT 10 amps	$3.30	$2.97	$2.64	$2.31
173-17AC1-T	SP-DT 5 amps	3.00	2.70	2.40	2.10

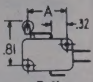


V-3

Quick



Lever



Roller

TYPE "V3" BASIC MINIATURE
HIGH CAPACITY SP-DT SWITCHES

In a wide variety of operating characteristics. Extra long operating life. Terminals: *screw; †quick connect. #Maximum.

Cat. No.	Op. Force	Dif. Trav.	Ea. 1-49	50-99	100-499
173-V3-1*‡	6-14 oz.	.006-.016"	$1.15	$0.84	$0.72
173-V3-1-D8†	6-14 oz.	.006-.016"	.85	.62	.54
High electrical capacity. UL and CSA listed: 15 amps, 125 or 250 v-ac: 1/3 hp, 125 or 250 v-ac; ½ amp, 125 v-dc; ¼ amp, 250 v-dc. ‡Military MS25253-4.					
173-V3-101*	8 oz.#	.006-.016"	1.15	.84	.72
173-V3-101-D8†	8 oz.#	.006-.016"	.85	.62	.54
Long life for general use. UL and CSA listed: 10 amps, 125 or 250 v-ac; 1/3 hp, 125 or 250 v-ac; ½ amp, 125 v-dc; ¼ amp, 250 v-dc.					
173-V3-1101-D8†	75 gr.#	.002-.010"	.85	.62	.54
Low operating force. UL and CSA listed: 10 amps, 125 or 250 v-ac; 1/3 hp, 125 or 250 v-ac; ½ amp, 125 v-dc; ¼ amp, 250 v-dc.					
173-V3-26*	7-12 oz.	.002-.006"	1.35	.99	.85
Low differential travel. UL and CSA listed: 10 amps 125/250 v-ac.					
173-V3-245*	Temp. to +400° F.		1.75	1.28	1.10
173-V3-1301*	Temp. to +600° F.		37.25	27.19	23.47

Complete information on hi-temp switches available on request.

SERIES "V3L" SWITCHES
WITH INTEGRATED ACTUATOR

Series "V3L" switches combine the characteristics of the "V3" switches above with and integrated straight lever or roller lever to permit operation by cams or slides. Basic dimensions are shown above. Terminals: *screw; †quick connect. #Maximum.

INTEGRATED STRAIGHT LEVER
BASIC UNIT V3-1 OR V3-1-D8

Cat. No.	Dim. "A"	Op. Force	Ea. 1-49	50-99	100-499
173-V3L-1*	.84"	14 oz.#	$1.35	$.99	$.85
173-V3L-1-D8†	.84"	14 oz.#	1.00	.73	.63
173-V3L-2*	1.40"	8 oz.#	1.35	.99	.85
173-V3L-2-D8†	1.40"	8 oz.#	1.00	.73	.63
173-V3L-6*	2.34"	4 oz.#	1.35	.99	.85
173-V3L-6-D8†	2.34"	4 oz.#	1.00	.73	.63

BASIC UNIT V3-101 OR V3-101-D8

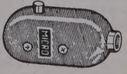
Cat. No.	Dim. "A"	Op. Force	Ea. 1-49	50-99	100-499
173-V3L-101*	.84"	9 oz.#	1.35	.99	.85
173-V3L-101-D8†	.84"	9 oz.#	1.00	.73	.63
173-V3L-104*	1.40"	4 oz.#	1.35	.99	.85
173-V3L-104-D8†	1.40"	4 oz.#	1.00	.73	.63
173-V3L-131*	2.34"	60 gr.#	1.35	.99	.85
173-V3L-131-D8†	2.34"	60 gr.#	1.00	.73	.63

INTEGRATED ROLLER LEVER
BASIC UNIT V3-1 OR V3-1-D8

Cat. No.	Dim. "A"	Op. Force	Ea. 1-49	50-99	100-499
173-V3L-3*	.81"	14 oz. #	1.50	1.10	.95
173-V3L-3-D8†	.81"	14 oz. #	1.20	.88	.76
173-V3L-4*	1.34"	8 oz.#	1.50	1.10	.95
173-V3L-4-D8†	1.34"	8 oz.#	1.20	.88	.76

BASIC UNIT V3-101 OR V3-101-D8

Cat. No.	Dim. "A"	Op. Force	Ea. 1-49	50-99	100-499
173-V3L-139*	.81"	8 oz.#	1.50	1.10	.95
173-V3L-139-D8†	.81"	8 oz.#	1.20	.88	.76
173-V3L-111*	1.34"	4 oz.#	1.50	1.10	.95
173-V3L-111-D8†	1.34"	4 oz.#	1.20	.88	.76

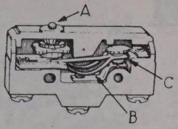


"AH" PENDANT SWITCHES
SP-DT 10 AMPS

Molded phenolic cases 3.062" long, 1.5" wide, .875" thick. Push-button operated. Momentary or maintained contact. UL and CSA listed: 10 amps, 125 or 250 v-ac.

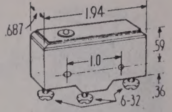
Cat. No.	Contact Action	Ea. 1-9	10-19	20-49	50-99
173-1AH4	SP-DT Momentary	$4.95	$4.46	$3.96	$3.47
173-2AH4	SP-DT Maintained	5.95	5.36	4.76	4.17

MICRO SWITCH®



GENERAL PURPOSE SNAP-ACTION SWITCHES

TYPE "Z" SP-DT 15 AMP.



Precision mechanisms in molded phenolic cases. They require low operating force, have low differential travel, accurate repeatability, and a long operating life. A polished stainless steel plunger (A) depresses the one-piece beryllium copper spring (B) and causes a snap-action which transfers the fine silver contacts (C). When pressure on the plunger is released the spring snaps the contact back to its original position. Overall dimensions at the right. Contacts are UL and CSA listed for 15 amps at 125/250/480 v-ac, 1/8 HP at 125 v-ac, ¼ HP at 250 v-ac, ½ amp at 125 v-dc, or ¼ amp at 250 v-dc. *Pressure in ounces. †Dimensions in inches. ‡ Same as BZ-2RQ18 except roller is turned 90º. §Has 6" long lever actuator.

WITH SCREW/CUP TERMINALS

Cat. No.	Ea. 1-9	10-19	20-49	50-99	See Fig.	O.F.*	R.F.*	P.T.†	O.T.†	D.T.†
173-BZ-2R-A2	$2.05	$1.85	$1.64	$1.44	1	9-13	4.0	.015	.005	.0004-.002
173-BZ-R-A2	2.45	2.21	2.06	1.82	1	7-9	4.0	.012	.005	.0002-.0003
173-BZ-2RQ1-A2	4.30	3.87	3.44	3.01	2	9-13	4.0	.015	.219	.0004-.002
173-BZ-2RQ18-A2	7.40	6.66	5.92	5.18	3	9-13	4.0	.015	.140	.0004-.002
173-BZ-2RQ181-A2	7.40	6.66	5.92	5.18	3‡	9-13	4.0	.015	.140	.0004-.002
173-BZ-2RD-A2	2.55	2.30	2.04	1.79	4	9-13	4.0	.015	.060	.0004-.002
173-BZ-2RDS-A2	5.00	4.50	4.00	3.50	4	13-19	4.0	.070	.060	.0004-.002
173-BZ-2RS-A2	2.55	2.30	2.04	1.79	5	9-13	4.0	.015	.060	.0004-.002
173-BZ-2RL-A2	2.40	2.16	1.92	1.68	6	5.0	0.5	.125	.060	.05
173-BZ-2RL2-A2	3.00	2.70	2.40	2.10	7	5.0	0.5	.125	.060	.05
173-BZ-2RW80-A2	2.50	2.25	2.00	1.75	8	2.5	0.5	.328	.219	.007-.050
173-BZ-2RW863-A2	2.70	2.43	2.16	1.89	8 §	1.0	. . .	.938	.578	.018-.145
173-BZ-2RW899-A2	3.15	2.84	2.52	2.21	8	2.5	0.5	.328	.125	.007-.050
173-BZ-2RW82-A2	3.15	2.84	2.52	2.21	9	3.5	.75	.318	.156	.004-.040
173-BZ-2RW822-A2	3.15	2.84	2.52	2.21	9	6.0	1.5	.078	.094	.003-.020

WITH SOLDER LUG TERMINALS

Cat. No.	Ea. 1-9	10-19	20-49	50-99
173-BZ-2R	$1.90	$1.71	$1.52	$1.33
173-BZ-R	2.35	2.12	1.88	1.65
173-BZ-2RQ1	4.20	3.78	3.36	3.94
173-BZ-2RQ18	7.30	6.57	5.84	5.11
173-BZ-2RQ181	7.30	6.57	5.84	5.11
173-BZ-2RD	2.50	2.25	2.00	1.75
173-BZ-2RDS	4.40	3.96	3.52	3.08
173-BZ-2RS	2.50	2.25	2.00	1.75
173-BZ-2RL	2.15	194	1.72	1.50
173-BZ-2RL2	2.80	2.52	2.24	1.96
173-BZ-2RW80	2.45	2.21	2.06	1.82
173-BZ-2RW863	2.55	2.30	2.04	1.79
173-BZ-2RW899	3.05	2.75	2.44	2.14
173-BZ-2RW82	3.10	2.79	2.48	2.17
173-BZ-2RW822	3.10	2.79	2.48	2.17

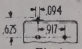


Fig.1

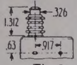


Fig.2

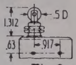


Fig.3

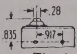


Fig.4

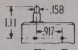


Fig.5

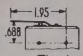


Fig.6

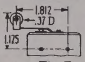


Fig.7

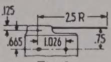


Fig.8

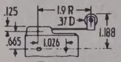


Fig.9

TYPE "A" SP-DT 20 AMP.

High inrush capacity. UL and CSA listed for 20 amps at 125/250/ at 125 v-ac, 2 HP at 250 v-ac, ¼ amp at 250 v-dc, ½ amp at 125 v-dc. §Has 1.64" leaf with 3/8" dia. roller.

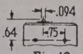


Fig.10

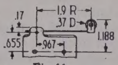


Fig.11

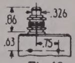


Fig.12

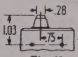


Fig.13

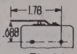
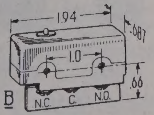


Fig.14

Cat. No.	Ea. 1-9	10-19	20-49	50-99	See Fig.	O.F.*	R.F.*	P.T.†	O.T.†	D.T.†
173-BA-2R-A2	$2.05	$1.85	$1.64	$1.44	10	14-22	10	.050	.010	.002-.0075
173-BA-2RV2-A2	3.25	2.93	2.60	2.28	11	3.5	0.5	.468	.060	.085
173-BA-2RQ1-A2	4.30	3.87	3.44	3.01	12	14-22	10	.050	.219	.002-.0075
173-BA-2RB-A2	2.55	2.30	2.04	1.79	13	14-22	10	.050	.093	.002-.0075
173-BA-2RL-A2	2.40	2.16	1.92	1.68	14	9	1	.340	.063	.065
173-BA-2RL2-A2	2.40	2.16	1.92	1.68	14§	9	1	.312	.063	.065

Cat. No.	Ea. 1-9	10-19	20-49	50-99
173-BA-2R	$2.25	$2.03	$1.80	$1.58
173-BA-2RV2	3.45	3.11	2.76	2.42
173-BA-2RQ1	4.55	4.10	3.64	3.19
173-BA-2RB	2.80	2.52	2.24	1.96
173-BA-2RL	2.55	2.30	2.04	1.79
173-BA-2RL2	3.20	2.88	2.56	2.24



B

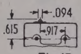


Fig.15

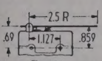


Fig.16

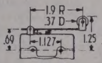


Fig.17

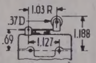
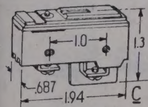
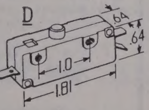


Fig.18



C



D

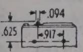


Fig.19

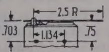


Fig.20

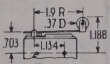


Fig.21

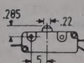


Fig. 22

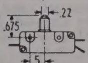


Fig. 23

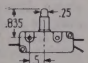


Fig. 24

TYPE "DT" DP-DT 10 AMP SWITCHES

Fig. B at left. Consists of two SP-DT switches with terminals separated by a fiberglass insulating barrier. UL and CSA listed for 10 amps at 125/250 v-ac, 0.3 amp at 125 v-dc, 0.15 amp at 250 v-dc. *Operating force in ounces. †Inches.

Cat. No.	See Fig.	O.F.*	R.F.*	P.T.†	O.T.†	D.T.†	Ea. 1-9	10-19	20-49	50-99
173-DT-2R-A7	15	12-20	2.0	.075	.005	.040-.060	$9.30	$8.37	$7.44	$6.51
173-DT-2RV-A7	16	3.5-6.0	1.0	1.0	.062	.490-.755	9.75	8.78	7.80	6.83
173-DT-2RV2-A7	17	4.5-7.5	1.5	.625	.047	.365-.565	10.15	9.14	8.12	7.11
173-DT-2RV22-A7	18	9-14	3.0	.313	.031	.195-.305	10.15	9.14	8.12	7.11

TYPE "MT" SP-DT MAGNETIC BLOW-OUT SWITCHES

Fig. C at left. Integral magnet protects switch contacts by deflecting arc. UL and CSA listed for 10 amps res. or ¼ HP at 125 v-dc, 1.5 to 3 amps res. at 250 v-dc.

Cat. No.	See Fig.	O.F.*	R.F.*	P.T.†	O.T.†	D.T.†	Ea. 1-9	10-19	20-49	50-99
173-MT-4RL-A28	19	12-18	5.0	.040	.005	.004-.007	$5.95	$5.36	$4.76	$4.17
173-MT-4RV-A28	20	2.0	.50	.050	.047	.085	6.30	5.67	5.04	4.41
173-MT-4RV2-A28	21	2.75	.25	.350	.031	.065	6.80	6.12	5.44	4.76

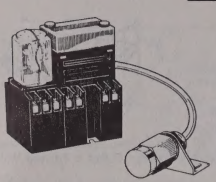
TYPE "PL" LOW COST BASIC SWITCHES

Fig. D at left. Snap-on terminals. SP-DT contacts listed for 15 amps at 125/250 volts a-c, ¾ HP at 125 v-ac, 1½ HP at 250 v-ac.

Cat. No.	See Fig.	Type Of Mounting	O.F.*	R.F.*	P.T.†	O.T.†	D.T.†	Ea. 1-49	50-99
173-1PL4	22	Side	20	3.0	.060	.050	.010	$0.92	$0.67
173-2PL4	23	Side or bushing	20	3.0	.075	.050	.010	1.05	.77
173-6PL41	24	Side or bushing	17	3.0	.085	.200	.010	1.30	.95

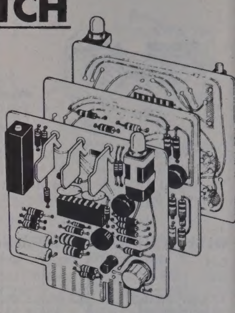
Under Characteristics in the listings above: O.F.* is the Operating Force in ounces; R.F.* is the Release Force in ounces; P.T.† is Pretravel in inches; O.T.† is Overtravel in inches; D.T.† is Differential Travel in inches. For additional information request a copy of MICRO SWITCH Catalog 50.

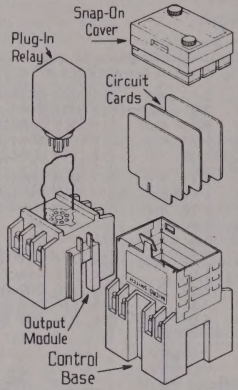
NEW FROM MICRO SWITCH



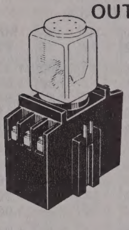
FM PROXIMITY SWITCHING CONTROLS OFFERING PERFORMANCE FLEXIBILITY, RELIABILITY AND OTHER IMPORTANT FEATURES

For industrial production line control manufacturing processes. They provide fast response times with the target at maximum sensitivity distances, ease of installation and adjustment, high stability in the face of temperature and voltage fluctuations, and wide choice of solid state circuit cards and sensors.



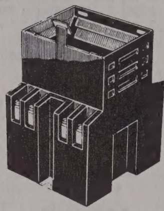


OUTPUT MODULE



An add-on module which provides output circuits for amplifier and function plug-in circuit cards. For counter drive circuit. Has integral reed relay circuit. Plug-in DP-DT relay contacts are rated 10 amps at 120 v-ac.

CONTROL BASE



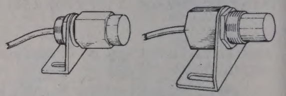
Provides internal firm-grip electrical connections for all plug-in circuit cards. Has external terminal connections for sensor inputs and load outputs. Provides physical protection for printed circuit cards. Provides conversion of line supply voltage to internal control voltage.

MICRO SWITCH New Type FM Industrial Proximity Switching Controls are applicable to almost every Industrial need for devices to sense and control the operation of continuously operating production lines. For complete, detailed information regarding components, applications and prices request a copy of the MICRO SWITCH PRODUCT BROCHURE FM.

PLUG-IN CIRCUIT CARDS

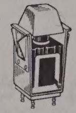
Available in power supply cards, amplifier cards and function cards such as ferromagnetic amplifier, on/off delay timer, all-metals amplifier decade counter, reed relay, slimline relay, dua amplifier, "or" gate logic, on-delay timer. "and" gate logic, off-delay timer, "or" amplifier logic overspeed detector, and underspeed detector These cards may be shuffled around to ge practically any switching function you'll ever need

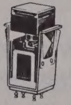
SENSORS

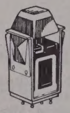


These are available in two general types. The FERROMAGNETIC RESPONSE controls permit the sensor to detect through most non-ferrous metals, such as a ferrous object hidden behind or sealed in a non-ferrous metal enclosure. ALL-METALS RESPONSE controls will sense all electroconductive metals, and can detect through such non-metallic materials such as plastic, fiber, wood, and fabric.

SN SOLID STATE PUSHBUTTONS

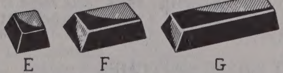

Truncated Un-lighted


Relegendable Lighted


Truncated Lighted

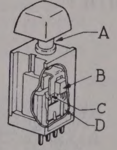
Panel Mounted Modules

These switch modules mount by insertion into a .900" x .760" hole on panels from .060" to .250" thick. Overall depth (including panel) 1.740" max. Button heights above panel: truncated .400"; relegendable (lighted) .440". Solder type turret terminals are .050" in diameter x .186" long.



BUTTONS NON-LIGHTED

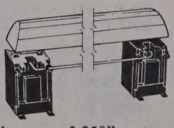
For use on one, two or three module switch assemblies. They are available in wide variety of colors, either plain or with one of many thousands of legends Micro Switch has tooling for. Type H uses a clear plastic color insert which may be changed, and on which any one of many legends may be printed. For complete information consult MICRO SWITCH Product Brochure SN, Issue 2.



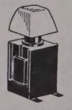
Switch Detail

Incorporating the revolutionary Hall effect solid state switch pioneered and developed by Micro Switch. Solid state pushbuttons eliminate the problems associated with mechanical switching such as contact bounce, contamination, and intermittent switching at low levels. In the illustration above A is the button plunger assembly, and the only moving part. B is a very stable barium-ferrite-filled PVC magnet. C is the Hall effect solid state integrated wafer described above. D is the switch contacts on the module base.

SPACE BAR



Includes two mounting modules, a torsion bar, and the space bar. Mounting modules are on 5.250" centers. The space bar will accept up to 10 switch modules on .375" centers. Complete description and other details given in Micro Switch Product Brochure SN, Issue 2.


Truncated Un-lighted

Relegendable Lighted

Truncated Lighted

Printed Circuit Modules

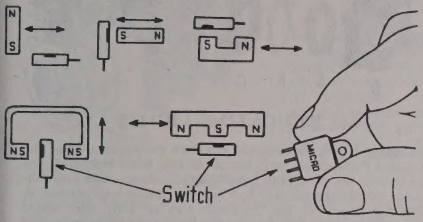
Designed for direct printed circuit board mounting, these modules have strips of two-sided tape which holds the module in place during the soldering operation. Overall size .735" x .735" x 1.842", including the button. Lighted modules are also available without a switch when needed for matching indicators.

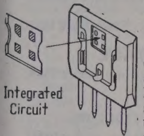
LIGHTED BUTTONS

For use with 201SN Series and 1SN Series lighted switch modules. They are available in the one and two-unit truncated type, and in the one-unit relegendable type, as shown above. Legends are on a film strip which may be easily changed. Buttons and film strip are available in a wide variety of color combinations, and with any one of many thousands of legends Micro Switch has available. For complete data see Product Brochure SN, Issue 2.

NEW FROM MICRO-SWITCH

MAGNETICALLY OPERATED SOLID STATE SWITCHES

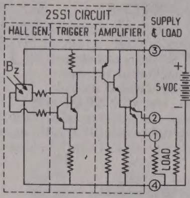


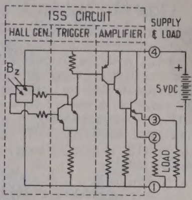


For use in high speed machinery as limit and control switches, synchronizing and timing switches, shaft speed sensors, position sensors, etc., and in compact, computer key-board assemblies. They require no physical contact, levers or linkages, and provide high speed response of 20 milliseconds. Switches utilize a unique combination of Hall sensor with a solid state trigger and amplifier, in a single integrated circuit as shown at the right. The switch housing is constructed by molding plastic around a metal grid to add rigidity. A cavity in the plastic contains the integrated circuit chip (as shown at the left) which is protected by filling the cavity with a silicone compound. Switch operation is by an external magnetic field from a permanent magnet or electromagnet. The Hall effect, which is the development of a voltage across the edges of a current carrying electrical conductor, is used. This voltage is attained whenever a magnetic field is applied in the proper direction and perpendicular to the flat side of the conductor. When current flow through the conductor is held constant and the magnetic induction is varied the Hall voltage is proportional to the magnetic induction or flux density. Types 1SS2, 1SS3 and 1SS4 have a magnetic flux concentrator added to concentrate more of the available flux into the integrated circuit, and permitting switching control at greater distances. The integrated trigger and amplifier circuit convert the Hall voltage into a 3-volt digital signal which is directly compatible with high speed digital counting and timing circuits.

CHARACTERISTICS W/STANDARD PERMANENT MAGNET

Gauss Reference & Function	Type 1SS1	Type 1SS2	Type 1SS3	Type 1SS4	Type 2SS1
750 G., Operate Max.	.068"	.102"	.141"	.149"	.092"
300 G., Operate Min.	.237"	.309"	.378"	.362"	.268"
100 G., Must Release	.504"	.614"	.722"	.727"	.542"



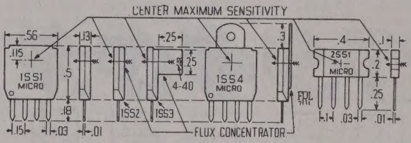


ABSOLUTE MAXIMUM RATINGS

Supply Voltage	Cont. +8 v-dc. Pulsed +10 v-dc for 1 sec. max.
Load on Outputs	10 ma. from each output, 20 ma. paralleled.
Temperature	Operating & storage -40 to +70° C.
Magnetic Flux	No limit, cannot be damaged by overload.

ELECTRICAL CHARACTERISTICS

Supply Volts	+4.9 to 5.25 v-dc. Temp. -40° to +70° C.
Supply Current	15 ma. max. (Plus load current).
Output Volts	Operated: +2.9 v-dc min. with 1 to 10 ma. load. Released: +0.3 v-dc max. with 2000 ohm load.
Output Sw. Time	Rise time: 0.5 millisec. max. (10-90%). Fall time: 10 millisec. max. (90-10%).
Operation rate	10,000 operations per second max.



Cat. No.	Description	Ea. 1-9	10-19	20-49	50-99
173-1SS1	Solid State Switch	**$2.70**	**$2.43**	**$2.16**	**$1.99**
173-1SS2	Solid State Switch	**3.00**	**2.70**	**2.40**	**2.10**
173-1SS3	Solid State Switch	**3.10**	**2.79**	**2.48**	**2.17**
173-1SS4	Solid State Switch	**3.00**	**2.70**	**2.40**	**2.10**
173-2SS1	Solid State Switch	**4.10**	**3.69**	**3.28**	**2.87**
173-101SS3	Permanent Magnet*	**1.84**	**1.66**	**1.47**	**1.29**
173-101SS4	Std. Permanent Magnet	**3.50**	. . . .	. . . .	. . . .

*Size .25" diameter x 1.25" long.

For additional information request a copy of "Magnetically Operated Solid State Switches . . . Application Notes".

TYPE RY COMPACT INDUSTRIAL RELAYS

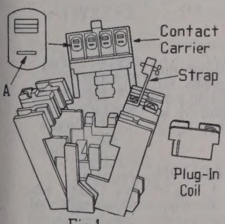
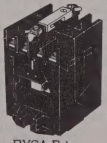
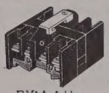


Fig.1

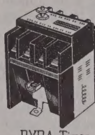
2, 4, 6, OR 8-POLE
ST-NO OR ST-NC
10 AMP., 600 V.
CONTACTS



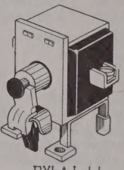
RYCA Relay



RYAA Adder



RYRA Timer



RYLA Latch

A new concept in industrial type control relays. Only a screwdriver is required to change coils, or to change SP-ST-NC. By removing only one screw in the white nylon strap (See Fig. 1) the relay can be opened for access to the interior to change the coil, or to change any contacts (A in Fig. 1) from SP-ST-NO by inserting a screwdriver in the slot and turning the contact assembly 180°. Any contact may be SP-ST-NO or SP-ST-NC.

BASIC RYCA RELAYS

With screw-driver adjustable features described above. Molded plastic housing measures 3-1/8" x 2-7/32" x 3-29/32" high. Terminals are pressure-plate type with locking screw. Individual contacts may be adjusted to be SP-ST-NO or SP-ST-NC.

Cat.	Description	Net
173-RYCA-20	2-pole relay assembly less coil	**$13.20**
173-RYCA-40	4- pole relay assembly less coil	**16.00**

RELAY COILS

For insertion in the basic RYCA relays listed above. Each is totally enclosed in a molded plastic housing.

Cat.	Description	Net
173-RYZ1C	For 24 volts, 60 Hz AC	**$5.50**
173-RYZ1A	For 120 volts, 60 Hz AC	**5.50**
173-RYZ1E	For 240 volts, 60 Hz AC	**5.50**

RYAA ADDER CONTACTS

For use on RYCA Basic Relays to obtain 6-pole or 8-pole contact action. Contacts are convertible to SP-ST-NO or SP-ST-NC action with only a screw-driver. Adds 1-5/8" to total height.

Cat.	Description	Net
173-RYAA-20	2-pole adder assembly for RYCA relay	**$4.40**
173-RYAA-40	4-pole adder assembly for RYCA relay	**8.80**

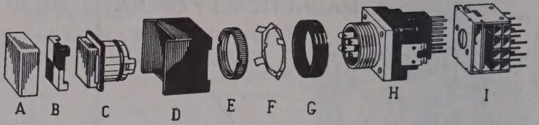
ACCESSORIES

Series RYRA Timers are available with either On or Off delay in models for 0.1 to 10 sec., 0.6 to 60 sec., and 1.8-180 sec. Prices and delivery will be furnished on request.

Series RYLA latch Attachment, with provision for either manual or electrical release, is available for RYCA Relays. Prices and delivery will be furnished on request.

For complete information request a copy of MICRO-SWITCH Product Brochure RY, Issue 2.

MICRO SWITCH®



TYPE PMH OILTIGHT
LIGHTED PUSHBUTTON SWITCHES

Buna N elastomer seals around the operating plunger and mounting bushing prevent cutting oils, lubricants, petroleum, hydralic fluids, alcoholic solvents and similar liquids from entering through the device or the panel hole. Assemblies are available with or without colored displays, with from 1 to 4 colors, and with SP-DT, DP-DT, or 4P-DT switching elements. Assemblies mount in a .875" hole, on panels from .0625" to .250" thick. Display front is 1.100" square, projects .810" in front of panel. Maximum overall depth behind the panel is 2.500".

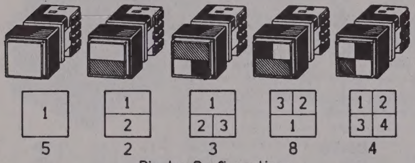
BASIC PMH PUSHBUTTONS

Basic PMH Lighted Pushbutton Switches consist of a plunger (C), a mounting ring (E), spacer seals (G), and an operator indicator (H). The cap set (A), color insert (B), panel guard bezel (D), keying ring (F), and switching element (I) are addative according to customer requirements and should be inserted in the basic pushbutton switch catalog number as detailed below.

Cat. 173-PMH-*-†-‡-§--††** Basic Pushbutton **Net Ea. $15.40**

*NUMBER OF LAMPS & †LAMP VOLTAGE

For 1 lamp insert "C" at * position	**Added cost $ 1.00**
For 2 lamps insert "G" at * position	**Added cost $13.60**
For 4 lamps insert "L" at * position	**Added cost $32.40**
For 5-6 v-ac/dc lamp insert "12" at † position	Included
For 12-14 v-ac/dc lamp insert "13" at † position	Included
For 24-28 v-ac/dc lamp insert "15" at † position	Included



Display Configurations

‡DISPLAY CONFIGURATIONS & §COLORS

Display configurations are available as illustrated above. Select the one required and insert at ‡ the configuration number. The added cost includes the required number of colors. Specify colors by inserting at § (in the sequence given in the illustration) the code letter (or letters) for the colors selected.

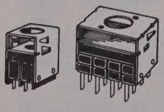
No. 5	Full display, no division	**Added cost $1.00**
No. 2	2-section, horizontal split	**Added cost $1.60**
No. 3	3-section, one-half at top	**Added cost $2.20**
No. 8	3-section, one-half at bottom	**Added cost $2.20**
No. 4	4-section, two top and two bottom	**Added cost $2.80**

§ **A** for none
§ **R** for red
§ **T** for amber
§ **Y** for yellow
§ **B** for blue
§ **W** for white

**PANEL GUARD BEZEL

Panel guard bezel (D) snaps over keying ring (F) and provides protection against accidental operation of switch. If required insert guard number at ** in the basic switch price above.

No. 2	Unguarded, black panel bezel	**Added cost $1.00**
No. 3	Unguarded, metallic panel bezel	**Added cost $1.00**
No. 4	Half-guard, black panel bezel	**Added cost $1.00**
No. 5	Half guard, metallic panel bezel	**Added cost $1.00**
No. 8	Full guard, black panel bezel	**Added cost $1.00**
No. 9	Full guard, metallic panel bezel	**Added cost $1.00**



†† SWITCH ELEMENTS

Switching elements (I) are available with SP-DT, DP-DT or 4P-DT contacts. Silver contacts are rated to make 7.5 amps, or break 1.2 amps at 120 v-ac non-inductive loads, or make/break 5 amps resistive at 240 v-ac. Gold contacts are rated 0.25 amps inductive at 30 v-dc, or 1.0 amp resistive at 30 v-dc. Select the switch action required and insert the proper code letters at †† in the basic cat. no.

CB	SP-DT	Momentary	Silver contacts	**Added cost $6.40**
JB	SP-DT	Momentary	Gold contacts	**Added cost $7.80**
CC	DP-DT	Momentary	Silver contacts	**Added cost $8.30**
CG	DP-DT	Alternate	Silver contacts	**Added cost $12.30**
CE	4P-DT	Momentary	Silver contacts	**Added cost $19.50**
CJ	4P-DT	Alternate	Silver contacts	**Added cost $23.50**

PML INDICATING LIGHTS

PML Indicating Lights are designed to match the appearance of the PMH Lighted Pushbutton Switches at the left. Basic Indicating Assemblies include the plunger (C), mounting hardware, and a switching element with lamps (H) which, when the button is depressed, illuminates the lamps for test purposes. Cap set (A), color insert (B), and panel guard bezel (D) are addative according to customer requirements and are listed below.

Cat. 173-PML-*-†-‡-§-** Basic Indicating Light **Net Ea. $15.40**

*NO OF LAMPS & †LAMP VOLTAGE

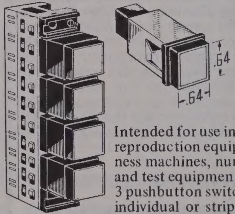
Use the same information here as given for this feature under PMH Lighted Pushbutton Switches at the left.

‡DISPLAY CONFIGURATIONS & §COLORS

Use the same information here as given for this feature under PMH Lighted Pushbutton Switches at the left.

**PANEL GUARD BEZEL

Use the same information here as given for this feature under PMH Lighted Pushbutton Switches at the left.

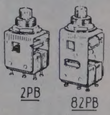


SERIES 3 LIGHTED PUSHBUTTON SWITCHES
CHOICE OF SINGLE OR STRIP MOUNTING FRONT REPLACEABLE

Intended for use in transportation control systems, reproduction equipment, data processing and business machines, numeric control panels, evaluation and test equipment, marketing systems, etc. Series 3 pushbutton switches provide a choice of matrix, individual or strip mount with uniform panel appearance, front of panel replacement of switches and lamps, relegendable buttons, five lighted display colors, momentary 2 level alternate-action, 5-amp power switches with form X, Y, and Z, electronic duty form A reed switches. Series 3 answers today's need for a complete line of versatile medium-priced high quality lighted pushbutton switches which allows individualizing panel appearance, and multiple options in the same size package. For complete dimensional and electrical data request a copy of the Lighted Pushbutton Switches Product Sheet Series 3, Bulletin 84-14016-B-571.

MICRO SWITCH® "PB" SWITCHES

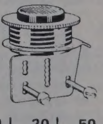
Miniature push-button switches incorporating the precision "SM" basic switch elements. UL listed: 5 amps, 125/250 v-ac; inductive 30 v-dc, 3 amps at sea level, 2.5 amps at 50,000 ft.; resistive 30 v-dc, 5 amps at sea level. Max. inrush 24 amps. For panel mounting.



MOMENTARY ACTION

Cat. No.	Sw. Action	Button Color	Ea. 1-9	10-19	20-49	50-99
173-2PB11-T2	2P-DT	Black	$6.05	$5.45	$4.84	$4.24
173-2PB12-T2	2P-DT	Red	6.05	5.45	4.84	4.24
173-3PB11-T2	3P-DT	Black	11.50	10.35	9.20	8.05
173-3PB12-T2	3P-DT	Red	11.55	10.40	9.24	8.13

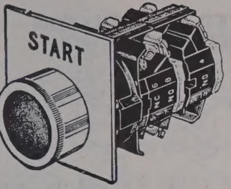
AUXILIARY ACTUATORS



Converts many basic pin plunger switches to manual operation. For panel mounting. Easy to assemble. Anodized bushing and bracket. Fits panel thicknesses from .060" to .312".

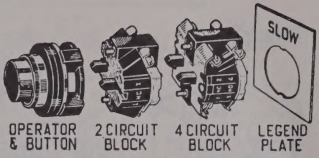
Cat. No.	Dia.	Button Color	Ea. 1-9	10-19	20-49	50-99
173-12MA1	½"	Black	$3.90	$3.51	$3.12	$2.73
173-12MA2	½"	Red	3.90	3.51	3.12	2.73
173-12MA5	1"	Black	4.25	3.83	3.40	2.98
173-12MA6	1"	Red	4.25	3.83	3.40	2.98

MICRO SWITCH®



TYPE PT
HEAVY DUTY OILTIGHT PUSHBUTTON SWITCHES

For control of industrial or other power tools or equipment. Individual components may be assembled to provide practically any combination of contact action desired. There is a wide variety of pushbutton styles for lighted or unlighted, guarded or unguarded operation. Legend plates listed here are plain, but others are available with practically any legend, standard or special, which may be required. For additional information get MICRO SWITCH Catalog 50.



OPERATORS

Basic units for use with one or more of the 2-circuit or 4-circuit contact blocks illustrated at right above. Furnished with pushbutton as listed below, less legend plate. Lighted push-button types are furnished with a #51 Mazda lamp for use with a transformer.

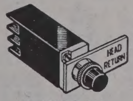
WITH UNLIGHTED PUSHBUTTONS

Extended Head Cat. No.	Half Guard Cat. No.	Full Guard Cat. No.	Button Color	List Each
173-PTP22	173-PTP32	173-PTP42	Black	$2.97
173-PTP23	173-PTP33	173-PTP43	Red	
173-PTP24	173-PTP34	173-PTP44	Orange	
173-PTP25	173-PTP35	173-PTP45	Yellow	
173-PTP26	173-PTP36	173-PTP46	Green	
173-PTP27	173-PTP37	173-PTP47	Blue	

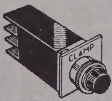
WITH LIGHTED PUSHBUTTONS

EXTENDED LENS Cat. No.	List Each	Lens Color	GUARDED LENS Cat. No.	List Each
173-PTH2213	$16.77	Red	173-PTH3213	$12.87
173-PTH2214		Amber	173-PTH3214	
173-PTH2215		Yellow	173-PTH3215	
173-PTH2216		Green	173-PTH3216	
173-PTH2217		Blue	173-PTH3217	
173-PTH2218		White	173-PTH3218	

PLASTIC LENS			PUSH-TO-TEST	
173-PTL2213	$16.77	Red	173-PTL5213	$15.07
173-PTL2214		Amber	173-PTL5214	
173-PTL2215		Yellow	173-PTL5215	
173-PTL2216		Green	173-PTL5216	
173-PTL2217		Blue	173-PTL5217	
173-PTL2218		White	173-PTL5218	



PTW2213



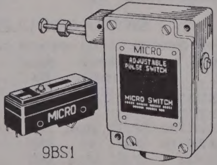
PTW3213

COMPACT INDICATORS

Compact indicating devices for 115 v-ac operation. The units listed have red jewels but other colors are also available. Lamps are built-in. Furnished less legend plate.

Cat. 173-PTW2213	Compact Indicator only	Each $11.77
Cat. 173-PTW5213	With Push-To-Test Switch	Each $15.07
Cat. 173-PTN-M00	1-1/8" x 1-1/8" blank plate	Each $ 0.33
Cat. 173-PTN-N00	27/32" x 1-7/8" blank plate	Each $ 0.33

PULSE SWITCHES



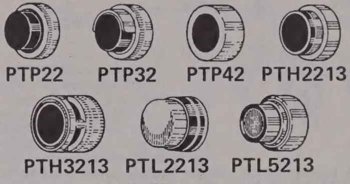
Provides momentary trip of a SP-DT switch on depression of plunger, none on plunger return. Prevents component failure due to sustained circuit energization. Pulse time depends on travel rate of plunger and pulse length adjustment. Pulse length adjustable from .030" to .450" beyond operating point. Operating plunger can be extended from .130" to .880". Operating force 3.5 lbs. max. Pretravel .110" max. SP-DT switch rated 15 amps at 125, 250 or 480 v-ac, or .05 amps at 125 v-dc. Sealed aluminum case is (HWD) 4.16" x 2.425" x 1.50". Case bottom is threaded for .500" conduit. Both UL and CSA listed.

Cat. 173-1PD1	Momentary Pulse Switch	Net $26.90

9BS1 PULSE SWITCH

Provides a momentary contact closure when actuator is depressed, not when it returns. SP-DT contacts rated 10 amps @ 125 v-ac.

Cat. 173-9BS1	Momentary Pulse Switch	Each $5.70



PUSHBUTTON STYLES

Lighted Pushbutton Series PTH2213, PTH3213, PTL2213 and PTL5213 have a plastic lens.

HEAVY DUTY CONTACT BLOCKS

For use singly or in any combination with Type PT Operators. Contact blocks tandem mount with captive screws. They contain fine silver, butting-type contacts for heavy duty electrical loads. Terminals are angled for easy wiring and will accept from #16 to #12 gauge copper wires. Current rating: AC; carry 10 amps, break 6 amps @ 110-120 v., 3 amps @ 220-240 v., 1.5 amps @ 440-480 v; DC carry 10 amps, break 2.2 amps @ 115-125 v., 0.5 amps @ 230-250 v. *Overlapping. †Sequencing.

2-CIRCUIT STYLE

Cat. No.	Contacts	List Each
173-PTCB	1NC-1NO	$3.30
173-PTCD	1NO	1.65
173-PTCE	1NC	1.65
173-PTCF	IND-IND	3.30
173-PTCG	INC-INC	3.30
173-PTCJ	INC-INO *	3.30
173-PTCK	INO-INO †	3.30

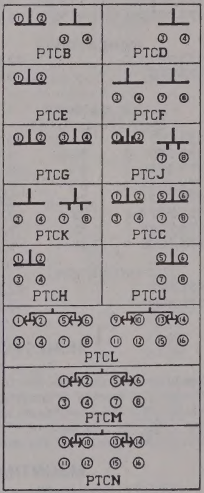
4-CIRCUIT STYLE

173-PTCC	2NC-2NO	$6.60
173-PTCH	1NC-1NO	3.30
173-PTCU	1NC-1NO	3.30

ELECTRONIC STYLE

With sliding silver contacts for low energy applications. Current rating: AC, carry 5 amps, break 3 amps @ 110-120 v., 1.5 amps @ 220-300 v., DC carry 1 amp @ 28 v., break 1 amp @ 28 v.

Cat. No.	Contacts	List Each
173-PTCL	4NC-4NO	$9.90
173-PTCM	2NC-2NO	4.95
173-PTCN	2NC-2NO	4.95



CIRCUIT DETAIL

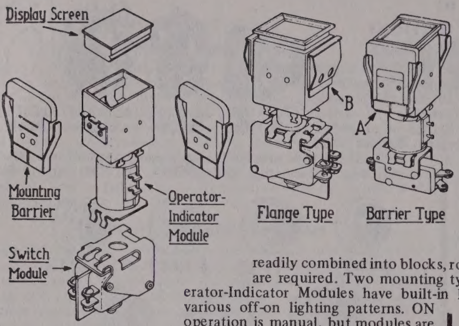
LEGEND PLATES

Blank aluminum plates for use with the OPERATOR units listed at the upper left. Plates are also available with two or three-word legends. For a complete listing of stock legends see SWITCHCRAFT Catalog 71.

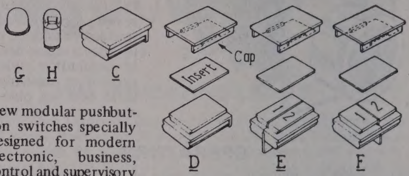
Cat. 173-PTN-B00	2½" x 2½" in size	Net $0.33
Cat. 173-PTN-C00	1-7/8" x 1-7/8" in size	Net $0.33

QUANTITY PRICES
FOR PT SWITCHES
SUPPLIED ON REQUEST

MICRO SWITCH®



ILLUMINATED PUSHBUTTON SWITCHES



New modular pushbutton switches specially designed for modern electronic, business, control and supervisory applications. Units are readily combined into blocks, rows or columns. Components snap-fasten together. No special tools are required. Two mounting types, barrier and flange, are illustrated above in Figs. A and B. Operator-Indicator Modules have built-in lamp sockets. Display screens (Figs. C thru F) are available for various off-on lighting patterns. ON operation is manual, but modules are available with built-in coils for electric hold-ON and disconnect. Provision for light barriers where multiple lighting patterns are to be used. MICRO SWITCH catalogs giving complete information are available to industrial users on request.

OPERATOR-INDICATOR MODULES

SHORT BARRIER
Fig. A. Prod. Cl. 86*

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2C1	2	None	$3.55
173-2C3	4	None	4.15
173-2C13	2	6 v.	8.35
173-2C15	4	6 v.	8.90
173-2C25	2	28 v.	8.50
173-2C27	4	28 v.	9.00
173-2C37	2	48 v.	9.10
173-2C39	4	48 v.	9.70

INDICATOR

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2F1	2	....	$2.80
173-2F3	4	....	3.35

SHORT FLANGE
Fig. B. Prod. Cl. 86*

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2C10	2	None	$4.05
173-2C12	4	None	4.55
173-2C22	2	6 v.	8.80
173-2C24	4	6 v.	9.35
173-2C34	2	28 v.	8.90
173-2C36	4	28 v.	9.50
173-2C46	2	48 v.	9.60
173-2C48	4	48 v.	10.10

INDICATOR

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2F10	2	....	$3.25
173-2F12	4	....	3.75

LONG BARRIER
Fig. A. Prod. Cl. 86*

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2C7	2	None	$3.55
173-2C9	4	None	4.15
173-2C19	2	6 v.	8.35
173-2C21	4	6 v.	8.90
173-2C31	2	28 v.	8.50
173-2C33	4	28 v.	9.00
173-2C43	2	48 v.	9.10
173-2C45	4	48 v.	9.70

INDICATOR

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2F7	2	....	$2.80
173-2F9	4	....	3.35

LONG FLANGE
Fig. B. Prod. Cl. 86*

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2C4	2	None	$4.05
173-2C6	4	None	4.55
173-2C16	2	6 v.	8.80
173-2C18	4	6 v.	9.35
173-2C28	2	28 v.	8.90
173-2C30	4	28 v.	9.50
173-2C40	2	48 v.	9.60
173-2C42	4	48 v.	10.10

INDICATOR

Cat. No.	Sockets	Hold Coil DC	Each 1-24
173-2F4	2	....	$3.25
173-2F6	4	....	3.75

SERIES 2C200 MODULES
Fig. A. Prod. Cl. 86*

Operator-Indicator Modules featuring removeable lamp holder assembly for manual re-lamping. Completely interchangeable with above units and accept same snap-on components. Specify by adding "200" to last digit of "2C" listing. Example: 2C1 becomes 2C201. Net prices are the same.

MOUNTING BARRIERS

SHORT. Prod. Cl. 85*

Cat. No.	Color	Net Each
173-2B1	Gray†	
173-2B3	Black†	1-24
173-2B10	White†	$0.45
173-2B11	Red†	
173-2B5	Gray‡	25-99
173-2B7	Black‡	$0.41
173-2B12	White‡	
173-2B13	Red‡	

LONG. Prod. Cl. 85*

Cat. No.	Color	Net Each
173-2B2	Gray†	
173-2B4	Black†	1-24
173-2B14	White†	$0.45
173-2B15	Red†	
173-2B6	Gray‡	25-99
173-2B8	Black‡	$0.41
173-2B16	White‡	
173-2B17	Red‡	

Panel thickness: †1/16" to 3/16"; ‡3/16" to 5/16".

SPACING BARRIERS

173-2B9	Gray§	Each
173-2B18	Black§	1-24
173-2B19	White§	$0.40

173-2B23	Gray§	Each
173-2B24	Black§	1-24
173-2B25	White§	$0.40
173-2B26	Red§	

§Panels .06" to .31" thick.

LAMP FILTERS

Colored silicone rubber for use on T-1-3/4 lamps.

Cat. No.	Color	Net Ea.
173-2G5	Red	
173-2G7	Green	1-24
173-2G10	Amber	$0.22
173-2G6	Yellow	
173-2G8	Blue	25-99
173-2G11	White	$0.20

T-1-¾ LAMPS

Used in Operator-Indicator Module. Base: Fl-flanged; Gr-grooved.

Cat. No.	Lamp Base	Fil. V.	Ea. 1-9	Box 10
153-327	Fl.	28	$0.50	$4.99
153-330	Fl.	14	.67	6.68
153-328	Fl.	6	.39	3.94
153-334	Gr.	28	.75	7.49
44-336	Gr.	14	1.04	10.39
44-337	Gr.	6	1.18	11.78

LAMP-FILTER TOOL

173-15PA32	For inserting/removing lamps	Each $1.10

DISPLAY SCREENS

Product Class 84*. Fig. C is solid. Fig. D has 3 pieces all same color Fig. E and F have clear insert and cap for using legend.

SOLID SCREENS. Fig. C.

Cat. No.	Color	Net Ea.
173-2A1	Red	1-24
173-2A2	Yellow	$0.56
173-2A3	Green	
173-2A4	Blue	25-99
173-2A5	White	$0.51

3-PIECE SCREENS. Fig. D.

Cat. No.	Color	Net Ea.
173-2A66	Red	1-24
173-2A67	Yellow	$0.72
173-2A68	Green	
173-2A69	Blue	25-99
173-2A70	White	$0.66

SPLIT SCREENS. Fig. F.

Cat. No.	Color 1	Color 2	Net Ea.
173-2A36	Red	Red	
173-2A37	Red	Yellow	1-24
173-2A38	Red	Green	$1.35
173-2A39	Red	Blue	
173-2A40	Red	White	25-99
173-2A41	Yellow	Green	$1.23
173-2A42	Yellow	Blue	
173-2A43	Yellow	White	100-
173-2A44	Yellow	Yellow	499
173-2A45	Green	Blue	$1.11
173-2A46	Green	White	
173-2A47	Green	Green	
173-2A48	Blue	White	
173-2A49	Blue	Blue	
173-2A50	White	White	

SPLIT SCREENS. Fig. E.

Cat. No.	Color 1	Color 2	Net Ea.
173-2A51	Red	Red	
173-2A52	Red	Yellow	1-24
173-2A53	Red	Green	$1.35
173-2A54	Red	Blue	
173-2A55	Red	White	25-99
173-2A56	Yellow	Green	$1.23
173-2A57	Yellow	Blue	
173-2A58	Yellow	White	100-
173-2A59	Yellow	Yellow	499
173-2A60	Green	Blue	$1.11
173-2A61	Green	White	
173-2A62	Green	Green	
173-2A63	Blue	White	
173-2A64	Blue	Blue	
173-2A65	White	White	

SWITCH MODULES. Prod. Cl. 87*

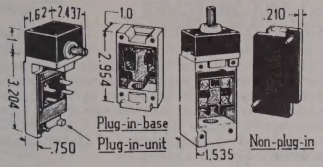
#Gold contacts. †Silver contacts. ‡125/250 v-ac. §30 v-dc.

Cat. No.	Switch Circuitry		Basic Sw.	Max. Amps A-C‡	Max. Amps D-C§	Ea. 1-24	25-99
173-2D1	2P-DT	Mom.	SM	..	1	$4.25	$3.87
173-2D25	2P-DT	Alt.	SM	..	1	5.90	5.37
173-2D100	SP-DT	Mom.	SM†	5	5	2.70	2.46
173-2D118	SP-DT	Alt.	SM†	5	5	4.20	3.82
173-2D2	2P-DT	Mom.	SM†	5	5	3.45	3.14
173-2D26	2P-DT	Alt.	SM†	5	5	5.10	4.64
173-2D5	3P-DT	Mom.	SM†	5	5	5.00	4.55
173-2D101	3P-DT	Alt.	SM†	5	5	8.95	8.14
173-2D9	4P-DT	Mom.	SM†	5	5	8.20	7.46
173-2D33	4P-DT	Alt.	SM†	5	5	9.80	8.92
173-2D68	SP-DT	Mom.	BZ-2R-A2	15	5	3.50	3.18
173-2D70	SP-DT	Mom.	V3	10	10	1.95	1.77
173-2D72	2P-DT	Mom.	V3	10	10	2.95	2.71
173-2D89	2P-DT	Mom.	DT-2R-A7	10	3	8.25	7.51

QUANTITY DISCOUNTS

Where **EACH 1-24** prices are shown deduct 9% for quantities of 25-99, 18% for quantities of 100-499. *Units of same Product Class may be combined for greater quantity discounts.

MICROSWITCH® LIMIT SWITCHES



HEAVY DUTY LS SERIES

Die cast zinc alloy housings for ½" conduit, chromium treated against corrosion. External surfaces epoxy painted. Positive sealing against oil, water and dust. Design meets NEMA classifications 1, 4 and 13. Units illustrated are for rotary operation. These, and others on this page, are available for either fast replacement plug-in, or non-plug-in mounting. Features include generous overtravel, double actuating shaft bearings on rotary types, new leverlock design, keyed operating head/housing assembly, and UL and NEMA industrial control 600 volt spacing. Illustration shows SPDT models, DPDT models are .481" higher overall. Constant current rating 10 amps at 120, 240, 480, 600 v-ac, or 120, 240 v-dc. P.T. = pretravel. D.T. = differential travel. O.T. = overtravel. O.F. = operating force.

SIDE ROTARY ACTUATION

Cat. No. 173-LSA-★	Type Unit	Type Sw.	Characteristics P.T.	D.T.	O.T.	O.F.	Net Ea.
1A-13*	Plug-in	SPDT	15°	5°	60°	4"/lb.	$18.15
3K-13*	Non plug-in	SPDT	15°	5°	60°	4"/lb.	15.95
6B-13*	Plug-in	DPDT	15°	7°	60°	4"/lb.	22.00
7L-13*	Non plug-in	DPDT	15°	7°	60°	4"/lb.	19.25

TOP ROTARY ACTUATION

173-LSB-★							
1A-1*	Plug-in	SPDT	35°	8°	100°	2.5"/lb.	$19.25
3K-1*	Non plug-in	SPDT	35°	8°	100°	2.5"/lb.	17.05
6B-1*	Plug-in	DPDT	35°	12°	100°	2.5"/lb.	23.10
7L-1*	Non plug-in	DPDT	35°	12°	100°	2.5"/lb.	19.35

*Units have shaft for clockwise operation. If counter clockwise operation is required change the 1 to a 2. Side operated models have the shaft to the right. For left operation change 3 to a 4, for rear operation the 3 becomes a 5. Actuating levers are listed below.

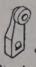
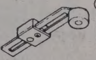


Fig.1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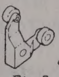


Fig.3

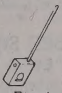


Fig.4

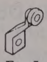
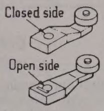


Fig.5



ROTARY ACTUATING LEVERS

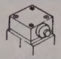
Rotary actuated switches above are without levers. When lever is ordered with switch add lever suffix to switch cat. no. (In example 173-LSA1A-13-1A) and add lever price to switch price. #Ball bearing. Mounting position: †open; ‡ closed (See above.) §One roller on each side. ‡‡Closed, both rollers on same side.

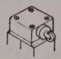
Lever Only Cat. No. 173-LSZ-★	Net	*Add Suffix	Arm Radius	Roller Dia. x L.	Made Of
51A†	$1.65	-1A†	1½"	¾" x ¼"	Nylon
51B†	1.65	-1B†	1½"	¾" x ¼"	Steel
51C‡	1.65	-1C‡	1½"	¾" x ¼"	Nylon
51D‡	1.65	-1D‡	1½"	¾" x ¼"	Steel
51L‡	3.85	-1L‡	1½"	¾" x ¼"	Ball#
52C‡	2.75	-2C‡	1½" to 3½"	¾" x ¼"	Nylon
52D‡	2.75	-2D‡	1½" to 3½"	¾" x ¼"	Steel
52J‡	3.85	-2J‡	1½" to 3½"	1" x ½"	Nylon
52K‡	3.85	-2K‡	1½" to 3½"	1½" x ¼"	Nylon
53E§	2.75	-3E§	Both 1½"	¾" x ¼"	Nylon
53S‡‡	2.75	-3S‡‡	Both 1½"	¾" x ¼"	Nylon
55A†	2.75	-5A†	1½"	¾" x ¼"	Nylon
55C‡	2.75	-5C‡	1½"	¾" x ¼"	Nylon
54M	2.75	-4M	1/8" x 5" aluminum rod		.....
54N	2.75	-4N	1/8" x 12" steel rod		.....
54R	2.75	04R	12" spring steel		.....

MICROSWITCH® BROCHURE LS

For complete, detailed information on the LS Series Limit Switches listed here, and many others, ask for Product Brochure LS. It will be mailed free on request.

★Include entire Cat. No. when ordering.


LSE1A


LSF1A

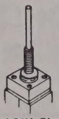
LSW1A

LSG1A

SIDE PLUNGER MODELS

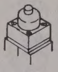
Plug-in and non plug-in bodies are for ½" conduit, and are as illustrated and described to the left. Each is furnished complete with head assembly as illustrated above. Models catalogued have actuator plunger to the right. *If plunger is required to the left change the 3 to a 4 in the cat. no. If rear action is required change the 3 to a 5. †Provides maintained contact in one direction, resets in opposite direction. P.T. = pretravel. D.T. = differential travel. O.T. = overtravel. Models LSE, LSF and LSW require 6 lb. operating force, Model LSG 10 lbs.

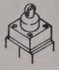
Cat. No. 173-LSE-★	Unit Type	Type Sw.	Characteristics P.T.	D.T.	O.T.	Net Ea.
1A3*	Plug-in, plain	SPDT	.100"	.025"	.190"	$20.90
3K3*	Non plug-in, plain	SPDT	.100"	.025"	.190"	18.70
6B3*	Plug-in, plain	DPDT	.100"	.035"	.190"	24.75
7L3*	Non plug-in, plain	DPDT	.100"	.035"	.190"	22.00
173-LSF-★						
1A3*	Plug-in, roller	SPDT	.100"	.025"	.190"	23.10
3K3*	Non plug-in, roller	SPDT	.100"	.025"	.190"	20.90
6B3*	Plug-in, roller	DPDT	.100"	.035"	.190"	26.95
7L3*	Non plug-in, roller	DPDT	.100"	.035"	.190"	24.20
173-LSW-★						
1A3*	Plug-in, adjust.	SPDT	.100"	.025"	.190"	22.00
3K3*	Non plug-in, adj.	SPDT	.100"	.025"	.190"	19.80
6B3*	Plug-in, adjust.	DPDT	.100"	.035"	.190"	25.85
7L3*	Non plug-in, adj.	DPDT	.100"	.035"	.190"	23.10
173-LSG-★						
1A3*	Plug-in, dual†	SPDT	.170"	.090"	.080"	24.20
3K3*	Non plug-in, dual†	SPDT	.170"	.090"	.080"	22.00
6B3*	Plug-in, dual†	DPDT	.170"	.090"	.080"	28.05
7L3*	Non plug-in, dual†	DPDT	.170"	.090"	.080"	25.30


LSJ1A-7A

LSJ1A-7M

LSK1A-8A


LSC1A


LSD1A

LSV1A

Plug-in and non plug-in bodies are for ½" conduit, and are as illustrated and described at the upper left. Each is furnished complete with head assembly as illustrated above. P.T. = pretravel. D.T. = differential travel, O.T. = overtravel. O.F. = operating force.

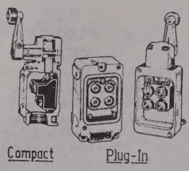
WOBBLE ACTION

Cat. No. 173-LSJ-★	Unit Type	Type Sw.	P.T.	O.F.	Net Ea.
1A-7A	Plug-in, plastic rod	SPDT	1"	10 oz.	$20.90
3K-7A	Non plug-in, plastic rod	SPDT	1"	10 oz.	27.60
6B-7A	Plug-in, plastic rod	DPDT	1"	10 oz.	23.65
7L-7A	Non plug-in, plastic rod	DPDT	1"	10 oz.	20.90
1A-7M	Plug-in, spring wire	SPDT	4"	5 oz.	19.25
3K-7M	Non plug-in, spring wire	SPDT	4"	5 oz.	17.05
6B-7M	Plug-in, spring wire	DPDT	4"	5 oz.	23.65
7L-7M	Non plug-in, spring wire	DPDT	4"	5 oz.	20.35
173-LSK-★					
1A-8A	Plug-in, cat whisker	SPDT	2"	5 oz.	18.15
3K-8A	Non plug-in, cat whisker	SPDT	2"	5 oz.	15.95
6B-8A	Plug-in, cat whisker	DPDT	2"	5 oz.	22.00
7L-8A	Non plug-in, cat whisker	DPDT	2"	5 oz.	19.25

TOP PLUNGERS. O.F. 4 LBS.

Cat. No. 173-LSC-★	Unit Type	Type Sw.	Characteristics P.T.	D.T.	O.T.	Net Ea.
1A	Plug-in, plain	SPDT	.070"	.015"	.190"	$20.90
3K	Non plug-in, plain	SPDT	.070"	.015"	.190"	17.60
6B	Plug-in, plain	DPDT	.070"	.020"	.190"	23.65
7L	Non plug-in, plain	DPDT	.070"	.020"	.190"	20.90
173-LSD-★						
1A	Plug-in, roller	SPDT	.070"	.015"	.190"	22.00
3K	Non plug-in, roller	SPDT	.070"	.015"	.190"	19.80
6B	Plug-in, roller	DPDT	.070"	.020"	.190"	25.85
7L	Non plug-in, roller	DPDT	.070"	.020"	.190"	23.10
173-LSV-★						
1A	Plug-in, adjustable	SPDT	.070"	.015"	.190"	20.90
3K	Non plug-in, adjust	SPDT	.070"	.015"	.190"	18.70
6B	Plug-in, adjustable	DPDT	.070"	.020"	.190"	24.75
7L	Non plug-in, adjust	DPDT	.070"	.020"	.190"	22.00

MICRO SWITCH®

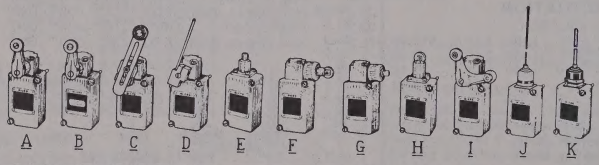


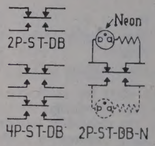
SERIES LS LIMIT SWITCHES

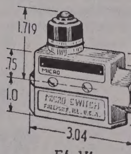
COMPACT & PLUG-IN TYPES

Small, compact "LS" Limit Switches are especially useful on machine tools or production lines where more than one limit switch is employed. Neon indicator types give visual indication of operation when switches must be located in inaccessible or hard to reach areas. Rugged aluminum housing is sealed to protect switch against dust, oil or damage. Operating heads may be positioned to suit requirement. Actuators are also adjustable. Lever types trip switch by movement from iether side. *18PA1 Switch/Terminal Block not included, must be ordered separately for Plug-In types. In the "Characteristics" listing below: O.F. = Operating Force; P.T. = Pre-travel; O.T. = Over travel: D.T. = Differential Travel. For complete limit switch information request MICRO SWITCH Catalog 50.

COMPACT Cat.	Net Ea.	PLUG-IN Cat.	Net Ea.	Actuator	Description	Characteristics O.F.	P.T.	O.T.	D.T.	Switch Action	@ 120/ 240 v-ac
173-1LS1	$17.60	173-201LS1*	$17.60	Fig. A	1.5" rad. arm w/roller	3 lb.	20°	30°	12°	2P-ST-DB	10 amps
173-7LS1	17.16	....		Fig. A	Same, for panel mounting	3 lb.	20°	30°	12°	2P-ST-DB	10 amps
173-1LS3	19.36	173-201LS3*	19.36	Fig. C	1.0"-3.5" arm w/roller	3 lb.	20°	30°	12°	2P-ST-DB	10 amps
173-1LS10	18.70	173-201LS10*	18.70	Fig. D	5.00" adjustable rod	5 oz.	20°	30°	12°	2P-ST-DB	10 amps
173-2LS1	17.77	173-202LS1*	15.40	Fig. E	Straight plunger	7 lb.	.065"	.25"	.02"	2P-ST-DB	10 amps
173-3LS1	21.45	173-203LS1*	20.90	Fig. F	Side plunger w/roller	9 lb.	.109"	.219"	.04"	2P-ST-DB	10 amps
173-4LS1	19.03	173-204LS1*	18.70	Fig. G	Side straight plunger	9 lb.	.109"	.25"	.04"	2P-ST-DB	10 amps
173-5LS1	18.92	173-205LS1*	17.60	Fig. H	Straight plunger w/roller	6 lb.	.065"	.219"	.02"	2P-ST-DB	10 amps
173-6LS1	22.00	173-206LS1*	20.90	Fig. I	1.5" rad. yoke w/rollers	2 lb.	55°	35°	20°	2P-ST-DB	10 amps
173-8LS1	17.71	173-208LS1*	15.40	Fig. K	4½" flexible cable	5 oz.	1.125"	....	....	2P-ST-DB	10 amps
173-8LS125	19.75	173-208LS125*	17.44	Fig. J	6½" wire actuator	1 oz.	1.75"		....	2P-ST-DB	10 amps
173-1LS501	20.57	173-201LS501*	20.57	Fig. B	W/neon ind. for 120 v-ac	3 lb.	20°	30°	12°	2P-ST-DB-N	10 amps
173-1LS501-A1	20.57	173-201LS501-A1*	20.57	Fig. B	W/neon ind. for 240 v-ac	3 lb.	20°	30°	12°	2P-ST-DB-N	10 amps
173-11LS1	22.00	....		Fig. A	1.5" rad. arm w/roller	3 lb.	23°	27°	16°	4P-ST-DB	10 amps
173-12LS1	22.17	....		Fig. E	Straight plunger	7 lb.	.065"	.25"	.045"	4P-ST-DB	10 amps
....		173-18PA1	4.40	2P-ST-DB switch/terminal block for Plug-In Models						2P-ST-DB	10 amps
....		173-29PA1	3.01	Neon lighted cover plate for LS Limit Switches, 120 v-ac							
....		173-29PA2	3.01	Neon lighted cover plate for LS Limit Switches, 240 v-ac							
....		173-29PA3	4.68	Neon lighted cover plate for LS Limit Switches, 480 v-ac							







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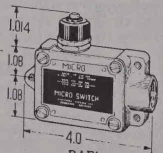

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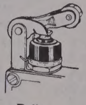


Roller Arm

ENCLOSED SWITCHES

COMPACT "E6" & "V6" TYPES

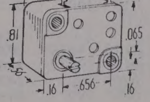
Cast aluminum housings with either side or flange mounting provision. Actuator seal boots and combination insulator seal bonded to bottom portion of case make these units drip-tight, weather resistance, and dust-tight. Current ratings, UL and CSA listed: SP-DT, 15 amps, 125/250/480 v-ac; 1/8 hp, 125 v-ac; ¼ hp 250 v-ac; ½ amp, 125 v-dc; ¼ amp 250 v-dc. DP-ST: 10 amps, 125/250 v-ac; 0.3 amp, 125 v-dc; 0.15 amp 250 v-dc. In the listing below: O.F. = Operating force; P.T. = Pretravel; O.T. = Overtravel; D.T. = Differential travel.

SIDE MT. Cat. No.	FLANGE MT. Cat. No.	Ea. 1-9	10-19	20-49	50-99	Actuator	Type Sw.	O.F. Oz.	P.T. Max.	O.T. Min.	D.T. Max.
173-BZE6-2RN	173-BZV6-2RN	$7.35	$6.62	$5.88	$5.15	Straight-in-line plunger	SP-DT	9-24	.078"	.219"	.002"
173-DTE6-2RN	173-DTV6-2RN	16.35	14.72	13.08	11.45	Straight-in-line plunger	DP-DT	26-59	.110"	.125"	.060"
173-BZE6-2RN2	173-BZV6-2RN2	10.95	9.86	8.76	7.67	Arm with roller	SP-DT	10-20	.188"	.219"	.006"
173-DTE6-2RN2	173-DTV6-2RN2	19.25	17.33	15.40	13.48	Arm with roller	DP-DT	10-30	.266"	.219"	.165"
173-BZE6-2RN28	173-BZV6-2RN28	12.65	11.39	10.25	8.86	One-way roller arm	SP-DT	8-20	.234"	.219"	.006"

HIGH CAPACITY "BAF1" TYPES

Heavy-duty, 3-hole mounted aluminum housings. High current momentary contact switch units easily replaced without dismantling housing. UL and CSA listed: 20 amps, 125/250/480 v-ac; 1 hp, 115 v-ac; 2 hp 230 v-ac; lamp load 10 amps, 125 v-ac; max. inrush 75 amps; ½ amp, 125 v-dc; ¼ amp, 250 v-dc. Type BAF1-2RN18 operates from any direction except pull. BAF1-2RQN8 has vertical roller plunger.

RH TYPE Cat. No.	LH TYPE Cat. No.	Ea. 1-9	10-19	20-49	50-99	Actuator	SP-DT Rating	O.F. Lbs.	P.T. Max.	O.T. Min.	D.T. Max.
173-BAF1-2RN-RH	173-BAF1-2RN-LH	$11.50	$10.35	$9.20	$8.05	Plunger	20 a. 125/250/480 v-ac	2.5	.094"	.219"	.010"
173-BAF1-2RN2-RH	173-BAF1-2RN2-LH	14.65	13.19	11.72	10.26	Roller	20 a. 125/250/480 v-ac	2	.219"	.250"	.020"
173-BAF1-2RN18-RH	173-BAF1-2RN18-LH	16.25	14.63	13.00	11.38	Flex. rod	20 a. 125/250/480 v-ac	...	15°	.....	.....
173-BAF1-2RQN8-RH	173-BAF1-2RQN8-LH	19.60	17.64	15.68	13.72	Roller	20 a. 125/250/480 v-ac	8	.125"	.187"	.0075"



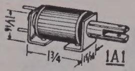
"V4" LOW FORCE ROTARY OPERATION SWITCHES

Ideal for coin-operated devices, counting applications, etc. Shaft drilled and slotted for wire actuator.

Cat. No.	Net Each	Action	Contact Rating	Op. Torque	Release Torque	Pre-travel	Over travel	Total Travel
173-V4-12	$2.05	SP-NO	5 a., 125/250 v-ac	4 gr. in.	.5 gr. in.	20° max.	20° min.	38° min.
173-V4-14	2.45	SP-DT	5 a., 125/250 v-ac	4 gr. in.	.5 gr. in.	20° max.	20° min.	38° min.

GUARDIAN SOLENOIDS

FOR INDUSTRIAL & COMMERCIAL APPLICATIONS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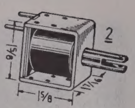

2

Guardian Solenoids are now available with both pull-type and push-type actions as listed below. The intermittent types are generally stronger and will do more work in terms of "lift", but should not be energized for more than 5 consecutive minutes, or be permitted to rise more than 85°C above 24°C ambient temperature without giving them sufficient time to cool between cycles or periods of operation. Continuous duty types are designed with a higher coil resistance so that they will not rise more than 85°C above the 24°C ambient temperature when operated within maximum lift and stroke ratings shown below. Intermittent types are designated by "I" in catalog number, continuous types by "C". The listing below includes only fast moving, popular types. For a complete listing of all solenoids request Guardian Catalog Bulletin H-7.

PULL TYPE SOLENOIDS

Cat. No.	Coil Volts	Coil Ohms	Oz. Lift & Stroke In. Min.	Max.	Size L x W x H	Oz. Wt.	Ea. 1-24	25-49	50-99	100-249	250-499
159-1A1-I-120A	120 ac	300	8 @ .125"	2 @ .500"	P x E x H	4.5	$3.71	$3.34	$3.15	$2.60	$2.41
159-1A1-I-115D	115 dc	803	5 @ .125"	1 @ .375"	P x E x H	4.5	4.02	3.62	3.42	2.81	2.61
159-2-I-120A	120 ac	60	33 @ .125"	9 @ .875"	N x L x O	10.0	5.20	4.68	4.42	3.64	3.38
159-2-C-120A	120 ac	166	10.5 @ .125"	3 @ .875"	N x L x I	10.0	5.36	4.82	4.56	3.75	3.48
159-3HD-C-24D	24 dc	52	100 @ .062"	3 @ .750"	Q x L x O	14.0	6.93	6.24	5.89	4.85	4.50
159-4-I-120A	120 ac	37	24 @ .125"	22 @ 1.00"	W x L x O	14.5	5.70	5.13	4.85	3.99	3.71
159-4-C-24D	24 dc	4	55 @ .125"	2,5 @ .875"	W x L x O	14.5	5.70	5.13	4.85	3.99	3.71
159-4-I-115D	115 dc	346	90 @ .125"	4 @ 1.00"	W x L x O	14.5	5.90	5.31	5.02	4.13	3.84
159-4HD-I-120A	120 ac	15	107 @ .062"	30 @ 1.25"	X x L x O	15.0	7.40	6.66	6.29	5.18	4.81
159-4HD-C-120A	120 ac	53	26 @ .125"	8 @ 1.25"	X x L x O	15.0	7.40	6.66	6.29	5.18	4.81
159-4HD-I-115D	115 dc	350	156 @ .125"	21 @ .750"	X x L x O	15.0	7.40	6.66	6.29	5.18	4.81
159-4HD-C-115D	115 dc	1200	70 @ .125"	4 @ .750"	X x L x O	15.0	7.40	6.66	6.29	5.18	4.81
159-11-C-120A	120 ac	200	12 @ .125"	1 @ 1.00"	S x E x I	7.5	3.64	3.28	3.09	2.55	2.37
159-11S-I-120A	120 ac	85	25 @ .125"	6 @ 1.00"	AAxExY	7.5	4.79	4.31	4.07	3.35	3.11
159-12-C-120A	120 ac	150	22 @ .125"	3 @ .875"	O x J x L	6.9	5.16	4.64	4.39	3.61	3.35
159-14-C-120A	120 ac	18	65 @ .125"	37 @ 1.50"	AAxUxW	9.0	6.97	6.27	5.92	4.88	4.53
159-18-I-120A	120 ac	8.8	280 @ .125"	80 @ 1.00"	ABxRxW	16.5	5.76	5.18	4.90	4.03	3.74
159-18-C-120A	120 ac	19.7	145 @ .125"	40 @ 1.00"	ABxRxW	16.5	5.76	5.18	4.90	4.03	3.74
159-18-C-240A	240 ac	78	145 @ .125"	40 @ 1.00"	ABxRxW	16.5	6.28	5.65	5.34	4.40	4.08
159-24-I-24D	24 dc	52	36 @ .062"	3 @ .500"	J x T x F	3.0	3.39	3.05	2.88	2.37	2.20

PUSH TYPE SOLENOIDS

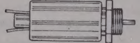
159-11P-I-120A	120 ac	85	20 @ .125"	4.8 @ 1.00"	K x T x I	7.5	$4.17	$3.75	$3.54	$2.92	$2.71
159-11P-C-120A	120 ac	200	9.6 @ .125"	0.8 @ 1.00"	K x T x I	7.5	4.17	3.75	3.54	2.92	2.71
159-16P-I-120A	120 ac	41	90 @ .125"	30 @ .750"	O x J x M	7.5	4.78	4.30	4.06	3.35	3.11
159-16P-C-120A	120 ac	85	50 @ .125"	10 @ .750"	O x J x M	7.5	4.78	4.30	4.06	3.35	3.11
159-18P-I-120A	120 ac	8.8	280 @ .125"	80 @ 1.00"	ABxRxW	16.5	6.29	5.66	5.35	4.40	4.09
159-18P-C-120A	120 ac	19.7	145 @ .125"	40 @ 1.00"	ABxRxW	16.5	6.29	5.66	5.35	4.40	4.09
159-28P-I-120A	120 ac	220	28 @ .062"	4 @ .500"	H x E x I	3.5	4.46	4.01	3.79	3.12	2.90
159-28P-C-120A	120 ac	400	16 @ .062"	2 @ .500"	H x E x I	3.5	4.46	4.01	3.79	3.12	2.90

PULL TYPE TUBULAR SOLENOIDS

Metal cased, single hole mounting solenoids which can be mounted side by side in limited spaces in computers, office equipment, copy machines, etc. With mounting bracket.

159-T3.5x9-I	24 dc	57	11 @ .031"	.5 @ .500"	H dia. x A	3.5	$3.86	$3.47	$3.28	$2.70	$2.51
159-T3.5x9-C	24 dc	195	8 @ .031"	.25 @ .312"	H dia. x A	3.5	3.96	3.56	3.37	2.77	2.57
159-T4x7-I	24 dc	82	10 @ .031"	.5 @ .250"	D dia. x B	3.5	4.41	3.97	3.75	3.09	2.87
159-T4x7-C	24 dc	240	4 @ .031"	.25 @ .156"	D dia. x B	3.5	4.52	4.07	3.84	3.16	2.94
159-T4x12-I	24 dc	48	15 @ .031"	.5 @ .312"	M dia. x B	3.5	4.73	4.26	4.02	3.31	3.07
159-T4x12-C	24 dc	220	6 @ .031"	.25 @ .312"	M dia. x B	3.5	4.83	4.35	4.11	3.38	3.14
159-T4x16-I	24 dc	29	17 @ .031"	.5 @ 1.18"	V dia. x B	3.5	5.04	4.54	4.28	3.53	3.28
159-T4x16-C	24 dc	145	10 @ .031"	.5 @ .875"	V dia. x B	3.5	5.15	4.64	4.38	3.61	3.35
159-T6x12-I	24 dc	48	35 @ .062"	1 @ .625"	M dia. x C	5.0	5.25	4.73	4.46	3.68	3.41
159-T6x12-C	24 dc	125	20 @ .062"	1 @ .500"	M dia. x C	5.00	5.36	4.82	4.56	3.75	3.48
159-T8x9-I	24 dc	30	50 @ .062"	1 @ .562"	H dia. x F	6.0	5.41	4.87	4.60	3.79	3.52
159-T8x9-C	24 dc	130	15 @ .062"	1 @ .374"	H dia. x F	6.0	5.46	4.91	4.64	3.82	3.55
159-T8x16-I	24 dc	15	80 @ .062"	2 @ 1.25"	V dia. x F	6.0	5.76	5.10	4.82	3.97	3.69
159-T8x16-C	24 dc	95	40 @ .062"	2 @ .687"	V dia. x F	6.0	5.78	5.20	4.91	4.05	3.76
159-T12x13-I	24 dc	14	150 @ .125"	4 @ .875"	O dia. x M	7.0	6.83	6.15	5.81	4.78	4.44
159-T12x13-C	24 dc	90	48 @ .125"	1 @ 1.00"	O dia. x M	7.0	7.04	6.34	5.98	4.93	4.58
159-T12x19-I	24 dc	9.5	175 @ .125"	6 @ 1.50"	Z dia. x M	8.0	7.86	7.07	6.68	5.50	5.11
159-T12x19-C	24 dc	59	80 @ .125"	1 @ 1.25"	Z dia. x M	8.0	7.96	7.16	6.77	5.57	5.17

PUSH TYPE TUBULAR SOLENOIDS

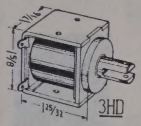


Similar to those above but for push operation by means of a non-magnetic rod. Single-hole mounting. Furnished with "L" shaped mounting bracket.

159-TP3.5x9-I	24 dc	57	11 @ .031"	.5 @ .500"	H dia. x A	3.5	$4.58	$4.12	$3.89	$3.21	$2.98
159-TP3.5x9-C	24 dc	195	8 @ .031"	.25 @ .312"	H dia. x A	3.5	4.68	4.21	3.98	3.28	3.04
159-TP4x12-I	24 dc	48	15 @ .031"	.5 @ .625"	M dia. x B	3.5	5.45	4.91	4.63	3.82	3.54
159-TP4x12-C	24 dc	220	6 @ .031"	.25 @ .312"	M dia. x B	3.5	5.56	5.00	4.73	3.89	3.61
159-TP4x16-I	24 dc	29	17 @ .031"	.5 @ 1.18"	V dia. x B	3.5	5.77	5.19	4.90	4.04	3.75
159-TP4x16-C	24 dc	145	10 @ .031"	.5 @ .875"	V dia. x B	3.5	5.87	5.28	4.99	4.11	3.82
159-TP6x12-I	24 dc	48	35 @ .062"	1 @ .625"	M dia. x C	5.0	5.98	5.38	5.08	4.19	3.89
159-TP6x12-C	24 dc	125	20 @ .062"	1 @ .500"	M dia. x C	5.0	6.08	5.47	5.17	4.26	3.95

In the listing above, under Size (L x W x H), reference letters are as below.

A 0.437"	E 0.937"	I 1.187"	M 1.500"	Q 1.781"	U 1.937"	Y 2.234"
B 0.500"	F 1.000"	J 1.250"	N 1.562"	R 1.812"	V 2.000"	Z 2.375"
C 0.750"	G 1.062"	K 1.312"	O 1.625"	S 1.875"	W 2.062"	AA 2.437"
D 0.875"	H 1.125"	L 1.437"	P 1.750"	T 1.843"	X 2.187"	AB 2.500"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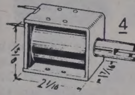
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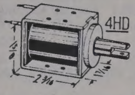
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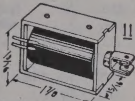
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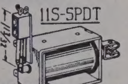
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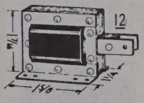
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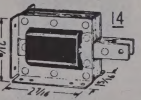
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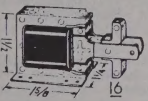
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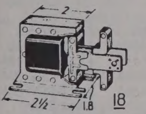
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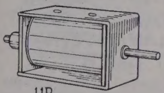
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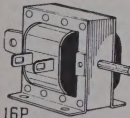
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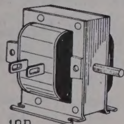
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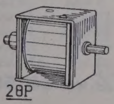
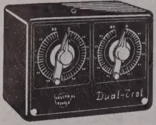

28P

INDUSTRIAL TIMER CONTROLS

SYNCHRONOUS MOTOR DRIVEN



Timing units shown on this and the following page are normally furnished for 115 v-ac 60 cps operation but are also available for 115 v-ac 50 cps at the same price, or for other frequencies at a higher price.

DUAL-TROL

RECYCLING TIMER

For continously repetetive timing sequences of adjustable On and Off intervals. Once started they operate continously until shut off manually. Recycling Timers consist of a Dual-Trol Cabinet and two plug-in TM Timing Modules. Latching relay contact rating 10 amps at 115 v-ac non-inductive loads. Metal cabinet is 7.5" x 5.125" x 5.562" overall. 0.5" knockouts provide cable entry to internal, screw type terminal strip for input and output. Furnished with two TM Modules as specified when ordering.

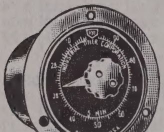
Cat. 317-Dual-Trol-115/60	For 115 v-ac 60 Hz	**Net $ 94.00**
Cat. 317-Dual-Trol-220/60	For 220 v-ac 60 Hz	**Net $100.00**

TM MODULES

Synchronous-motor driven timing units for use in the Dual-Trol Recycling Timer above. Two TM Modules are furnished with each Dual-Trol. Specify by the TM Cat. No. when ordering.

Cat. No.	**Timing Adjustable**	**Cat. No.**	**Timing Adjustable**
317-TM-6S	1/10 sec. to 6 sec.	**317-TM-5M**	5 sec. to 5 min.
317-TM-15S	¼ sec. to 15 sec.	**317-TM-15M**	15 sec. to 15 min.
317-TM-30S	½ sec. to 30 sec.	**317-TM-30M**	30 sec. to 30 min.
317-TM-60S	1 sec. to 60 sec.	**317-TM-60M**	1 min. to 60 min.
317-TM-3M	3 sec. to 3 min.	**317-TM-3H**	3 min. to 3 hrs.

TM Modules,	for 115 v-ac 60 cps	**Ea. $27.50**
TM Modules,	for 220 v-ac 60 cps	**Ea. $30.00**

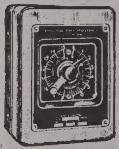


PERCENTAGE TIMERS

Designed to close a circuit for an adjustable percentage (3% to 97%) of the 100% time cycles shown below. 100% provides constant circuit closure. Recycling in action. SP-ST contacts handle 15 amps non-inductive a-c load. Body diameter 2-7/8". Flange dia. 3-7/8" Depth 3-3/4". Wt. 2 lbs.

Cat.	**100% Time**	**Cat.**	**100% Time**
317-PC-15S	15 sec	**317-PC-30M**	30 min
317-PC-30S	30 sec	**317-PC-60M**	60 min
317-PC-60S	60 sec	**317-PC-3H**	3 hrs
317-PC-3M	3 min	**317-PC-5H**	5 hrs
317-PC-5M	5 min	**317-PC-12H**	12 hrs
317-PC-15M	15 min	**317-PC-24H**	24 hrs

Any Type PC Percentage Timer.
For 115 v-ac 60 cycles **Each Net $31.00**



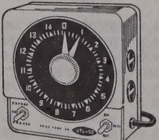
INTERVAL TIMER

AUTOMATIC RESET

For process timing. Interval is determined by moving pointer to desired time. A momentary contact starts the timing interval. At its completion the arm automatically resets to zero. SP-DT load contacts rated 15 amps non-inductive at 115 v-ac. Size 5-1/8" x 4¼" x 7-1/8". Wt. 6 lbs. For additional information Bulletin 403.

Cat. No.	**Max. Time**	**Dial Div.**	**Cat. No.**	**Max. Time**	**Dial Div.**
317-PAB-1S	1 sec	1 cps	**317-PAB-5M**	5 min	5 sec
317-PAB-6S	6 sec	6 cps	**317-PAB-15M**	15 min	15 sec
317-PAB-15S	15 sec	¼ sec	**317-PAB-30M**	30 min	30 sec
317-PAB-30S	30 sec	½ sec	**317-PAB-60M**	60 min	60 sec
317-PAB-60S	60 sec	1 sec	**317-PAB-3H**	3 hrs	3 min
317-PAB-3M	3 min	3 sec			

Any above PAB Timers
For 115 v-ac 60 cycles **Each Net $55.00**



UTILITY TIMER

Large 7" dial with large numerals and hands for easy reading in dimly lit areas. A concentric knob and hand simplify interval settings. A built-in SP-DT switch (rated 10 amps, non-inductive, at 115 v-ac) enables a load to be operated either during or at the completion of the time interval. Outputs at two standard a-c receptacles. A built-in buzzer, with on/off toggle switch, provides audible signalling. Synchronous drive motor operates from 115 v-ac, 60 Hz. Other voltages available on special order.

Cat. No.	**Max. Time**	**Net Ea.**	**Cat. No.**	**Max. Time**	**Net Ea.**
317-UTL-15M	15 Min.	**$37.00**	**317-UTL-60M**	60 Min.	**$30.00**
317-UTL-15H	15 Hrs.	**37.00**	**317-UTL-60H**	60 Hrs.	**37.00**

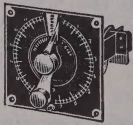
TIME DELAY TIMERS

AUTOMATIC RESET

For use on circuit controls where an adjustable or fixed time delay is required between the closing or opening of one circuit and the pre-determined closing or opening of another circuit. As soon as the clutch is disengaged an internal spring returns the actuating arm to its reset position. Easily adjusted to the required time by moving the pointer to the correct setting on the calibrated scale. SP-DT snap-action switch rated 10 amps non-inductive load at 115 v-ac. TDAF is 3-5/8" wide, 4-5/16" high, 3-3/8" deep. TDAB is 3-17/32" wide, 4-9/16" high, 4-1/8" deep. Av. shpg. wt. 4 lbs. For additional information request Bulletin 305.

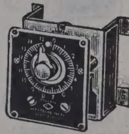
Panel Mtg. Cat. No.	**Surface Mtg. Cat. No.**	**Max. Time**	**Dial Div.**	**Net Each**
317-TDAF-1S	**317-TDAB-1S**	1 sec	1 cps	**For 115-v**
317-TDAF-6S	**317-TDAB-6S**	6 sec	6 cps	
317-TDAF-15S	**317-TDAB-15S**	15 sec	¼ sec	
317-TDAF-30S	**317-TDAB-30S**	30 sec	½ sec	
317-TDAF-60S	**317-TDAB-60S**	60 sec	1 sec	**$43.00**
317-TDAF-3M	**317-TDAB-3M**	3 min	3 sec	
317-TDAF-5M	**317-TDAB-5M**	5 min	5 sec	
317-TDAF-15M	**317-TDAB-15M**	15 min	15 sec	**For 220-v**
317-TDAF-30M	**317-TDAB-30M**	30 min	30 sec	
317-TDAF-60M	**317-TDAB-60M**	60 min	60 sec	
317-TDAF-3H	**317-TDAB-3H**	3 hrs	3 min	**$46.00**

CTD



CH

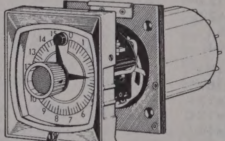
TIME DELAY



CSF

For fixed or adjustable control of time (within 100% limit) in closing or opening circuits, with automatic reset to zero at end of cycle. SP-DT contacts UL approved for 1000 watts non-inductive load at 115 v-ac 60 cps. Use Series CTD for thru-panel mounting; Series CH for panel-mounting; and Series CSF for back-of-panel mounting. For 220 v-ac 60 cps operation use 3000 ohm 10 watt series resistor in motor circuit. For additional information ask for Bulletin No. 305.

Max. Time	**Dial Div.**	**Series CTD Cat. No.**	**Series CH Cat. No.**	**Series CSF Cat. No.**
6 sec	6 cps	**317-TD-6S**	**317-H-6S**	**317-SF-6S**
15 sec	¼ sec	**317-TD-15S**	**317-H-15S**	**317-SF-15S**
60 sec	1 sec	**317-CTD-1M**	**317-CH-1M**	**317-CSF-1M**
3 min	3 sec	**317-CTD-3M**	**317-CH-3M**	**317-CSF-3M**
5 min	5 sec	**317-CTD-5M**	**317-CH-5M**	**317-CSF-5M**
For 115 v-ac 60 cycles operation		**Net Each $30.50**	**Net Each $27.50**	**Net Each $26.00**



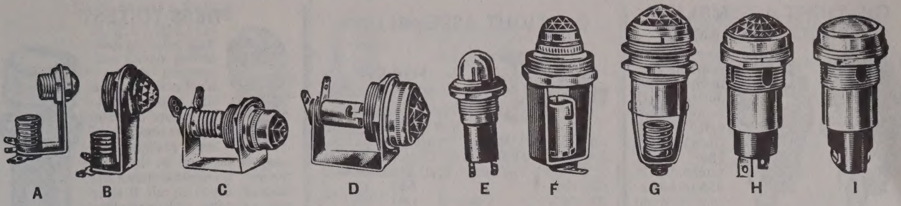
AUTOMATIC RESET DELAY/INTERVAL TIMER

Panel-mounted housing accepts any one of the synchronous motor driven, plug-in timing controls. Each timer provides two delayed sets of contacts and two sets of instantaneous contacts for any control requirement. New patented "Spider Clutch" provides a high degree of timing accuracy. Time settings are made by rotating the black knob and pointer to the desired time setting. In operation the red pointer will move to zero, providing a visual indication of elapsed time. When power is removed from clutch of timer the red pointer resets to the position of the black pointer, ready for another operation. All dials have 60 calibrations through 334° of rotation. Built-in "On" pilot light. Switch contact rating 10 amps, non-inductive at 125/250 v-ac. Power consumption 8 watts maximum. Bezel size 3-27/32 x 4-1/8". Depth 4-9/32".

Cat. No.	**Max. Time**	**Dial Div.**	**Cat. No.**	**Max. Time**	**Dial Div.**
317-GP 6S	6 sec.	.10 sec.	**317-GP 5M**	5 min.	5 sec.
317-GP 15S	15 sec.	.25 sec.	**317-GP 15M**	15 min.	15 sec.
317-GP 30S	30 sec.	.50 sec.	**317-GP 30M**	30 min.	30 sec.
317-GP 60S	60 sec.	1.0 sec.	**317-GP 60M**	60 min.	60 sec.
317-GP 3M	3 min.	3.0 sec.	**317-GP 3H**	3 hrs.	180 sec.

Any of the Above GP Timers
For 115 V-AC, 60 Hz **Each Net $46.50**

DIALCO PILOT LIGHT ASSEMBLIES



INCANDESCENT TYPES

For use on amplifiers, receivers, power supplies, or other types of electronic or electrical equipment. Furnished less lamps.

½" JEWEL (A)

Faceted jewel in nickel-plated brass holder. Lug terminals. With sockets as specified below. Mounts in 7/16" hole.

MINIATURE SCREW

Cat. 331-★	Color
502-1015-2131-102	Red
502-1015-2132-102	Green
502-1015-2133-102	Amber
502-1015-2134-102	Blue
502-1015-2135-102	White

MINIATURE BAYONET

502-1024-2131-102	Red
502-1024-2132-102	Green
502-1024-2133-102	Amber
502-1024-2134-102	Blue
502-1024-2135-102	White
Units Above 1-9	**Ea. $ .64**
Units Above 10-24	**$ .61**

CANDELABRA

502-1010-2131-102	Red
502-1010-2132-102	Green
502-1010-2133-102	Amber
502-1010-2134-102	Blue
502-1010-2135-102	White
Units Above 1-9	**Ea. $ .68**
Units Above 10-24	**$ .64**

1" JEWEL (G)

For 115-volts lamps. Faceted jewels in removeable friction fit chrome plated cap. Lamp socket removeable from rear by compressing bracket. Fits in 1" mounting hole.

CANDELABRA

Cat. 331-★	Color
502-3228-0431-302	Red
502-3228-0432-302	Green
502-3228-0433-302	Amber
502-3228-0434-302	Blue
502-3228-0435-302	White
Units Above 1-9	**Ea. $1.52**
Units Above 10-24	**$1.43**

½" JEWEL (F)

Faceted jewel removeable from front of panel for inserting lamp. Overall depths 2". Mounts in 11/16" hole on panels up to ¼" thick. ★Include entire Cat. No. when ordering.

MINIATURE BAYONET

Cat. 331-★	Color
502-8140-2131-100	Red
502-8140-2132-100	Green
502-8140-2133-100	Amber
502-8140-2134-100	Blue
Units Above 1-9	**Ea. $1.16**
Units Above 10-24	**$1.07**

½" JEWEL (C)

Faceted jewel removeable from front of panel for inserting lamp. Mounts in 11/16" hole.

MINIATURE SCREW

Cat.	Color
331-502-8137-2131-102	Red
331-502-8137-2132-102	Green
331-502-8137-2133-102	Amber
331-502-8137-2134-102	Blue
331-502-8137-2135-102	White
Units Above 1-9	**Ea. $ .89**
Units Above 10-24	**$ .81**

MINIATURE BAYONET

Same colors and prices as above. To order change "8137" to "8136"

1" JEWEL (D)

Faceted jewel removeable from front of panel for inserting lamp. Mounts in 1" hole.

MINIATURE SCREW

Cat.	Color
331-502-3241-0431-302	Red
331-502-3241-0432-302	Green
331-502-3241-0433-302	Amber
331-502-3241-0434-302	Blue
331-502-3241-0435-302	White
Units Above 1-9	**Ea. $1.30**
Units Above 10-24	**$1.22**

MINIATURE BAYONET

Same colors and prices as above. To order change "3242" to "3141"

1" JEWEL (H)

U.L. approved for 115-volt lamps. Faceted jewel in friction fit chrome plated brass holder removeable for lamp insertion. Bakelite insulation. Screw terminals. Mounts in 1" hole.

CANDELABRA

Cat.	Color
331-31-3101-0431-302	Red
331-31-3101-0432-302	Green
331-31-3101-0433-302	Amber
331-31-3101-0437-302	Clear
Units Above 1-9	**Ea. $2.15**
Units Above 10-24	**$1.89**

O.E.M.
QUANTITY
PRICES AVAILABLE
ON ALL ITEMS

NEON TYPES
WITH ½" PLASTIC (E)

For **B1A** neon lamps. Plastic dome unscrews for insertion of lamp. Built-in 56K ohms resistor for 105-125 volts a-c operation. Lens holder and mounting bushing nickel plated. Bakelite insulation. Overall depth 2-1/16". Mounts in 11/16" hole on up to 3/8" panels. U.L. and CSA listed. *With solder lugs. †With screw terminals.

Cat.	Color
331-95-0408-0931-142*	Red
331-95-0408-0933-142*	Amber
331-95-0408-0935-142*	Opal
331-95-0408-0937-142*	Clear
Net Each 1-9 $1.34	**10-24 $1.20**
331-95-1308-0931-142†	Red
331-95-1308-0933-142†	Amber
331-95-1308-0935-142†	Opal
331-95-1308-0937-142†	Clear
Net Each 1-9 $1.43	**10-24 $1.25**

If the Series 95-0408 is to be used with the new High Brightness B2A Neon Lamp change "08" to "63" and "142" to "112" in the catalog number when ordering. For example 331-0463-0931-112.

LESS RESISTOR

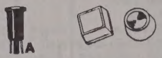
Cat.	Cat.	Color
331-95-0410-0931-102*	331-95-1310-0931-102†	Red
331-95-0410-0932-102*	331-95-1310-0932-102†	Green
331-95-0410-0933-102*	331-95-1310-0933-102†	Amber
331-95-0410-0934-102*	331-95-1310-0934-102†	Blue
331-95-0410-0935-102*	331-95-1310-0935-102†	White
331-95-0410-0937-102*	331-95-1310-0937-102†	Clear
Net Ea. 1-9 $1.14 10-24$1.01	**Net Ea. 1-9 $1.23 10-24 $1.10**	

1" JEWEL FOR NE-45 NEON (I)

U.L. approved for 115 v-ac use with **B7A** or similar lamps with built-in resistor. Smooth-face frosted-back lens in friction-fit holder. Depth 2-5/8". Screw terminals. Fits 1" hole.

Cat.	Color
331-31-0914-0111-302	Red
331-31-0914-0113-302	Amber
331-31-0914-0117-302	Clear
Units Above 1-9	**Ea. $2.42**
Units Above 10-24	**$2.18**

SYLVANIA PANEL LIGHTS
FOR FRONT OF PANEL MOUNTING



The unusual combination of reliability, performance, appearance and economy make these Panel Lights an ideal signaling device for computers, electrical instruments, appliances and machines. Two models, 30154-0 & 30152-0 are made of black phenolic. U.L. approved 75 watts-125 volts. Model 30154-0 for use with lamp and no lens or lamp with a Pyrex hard glass color cap cemented to the lamp with clear silicone rubber cement. Model 30152-0 is keyed to use round and rectangular lens shown below. All models use the long life slide base indicator lamps listed on another page (see index for Sylvania listing).

Cat. No.	See Fig	Type	Overall Size	Net 1-9	10-99
86-30154-0	A	Single Socket	1-5/16" x 5/8" Dia.	$0.54	$0.33
86-30152-0	A	Panel Socket	1-13/64" x 45/64" Dia.	.54	.33

PANEL LIGHT LENS

Lens are made of a Polycarbonate. The high working temperature of this material eliminates lens warping and signal distortion due to heat. Special optical design makes side visibility effective to within 5 to 10 degrees of horizontal. Both round and rectangular will fit socket 30152-0.

Cat. Round	Cat. Square	Color	Net 1-9	Net 10-99
86-30160-0	86-30170-0	Red		
86-30161-0	86-30171-0	Clear		
86-30162-0	86-30172-0	Amber	$0.24	$0.15
86-30163-0	86-30173-0	White		
86-30164-0	86-30174-0	Green		
86-30165-0	86-30175-0	Blue		

DIALCO PILOT LIGHT ASSEMBLIES

OIL-TIGHT ASSEMBLIES
FOR 115 VOLT LAMPS

Dome

Torpedo

Enclosed assemblies for heavy duty industrial applications. Gasketed lens. Glass lens give 180° light spread. Takes 6S6 incandescent (bayonet or screw mt.) lamp. Supplied less lamp. 1-3/16" x 1-7/8". Mounting hardware supplied. Wt. 3 oz. †With frosted back.

FOR 6S6 SCREW BASE LAMP

Torpedo Lens Cat. No. 331-103-★	Color	Dome Lens† Cat. No. 331-103-★
3101-1331-403	Red	3101-1211-403
3101-1332-403	Green	3101-1212-403
3101-1333-403	Amber	3101-1213-403
3101-1334-403	Blue	3101-1214-403
3101-1335-403	White	3101-1235-403
3101-1336-403	Yellow	3101-1216-403
3101-1337-403	Clear	3101-1217-403

	1-9	10-24	25-99
Any above net	$3.49	$3.21	$3.00

FOR 6S6 BAYONET BASE LAMP

3502-1331-403	Red	3502-1211-403
3502-1332-403	Green	3502-1212-403
3502-1333-403	Amber	3502-1213-403
3502-1334-403	Blue	3502-1214-403
3502-1335-403	White	3502-1235-403
3502-1336-403	Yellow	3502-1216-403
3502-1337-403	Clear	3502-1217-403

	1-9	10-24	25-99
Any above net	$3.83	$3.54	$3.30

OIL-TIGHT ASSEMBLIES
FOR B1A NEON LAMPS

Caps unscrew from front of panel. Equipped with miniature bayonet socket and built-in 56,000 ohm limiting resistor for use with B1A neon glow lamps. Mounts in 11/16" clearance hole. Overall size 61/64" x 2-9/64". Soldering terminals. †Translucent, unfrosted. §Frosted back.

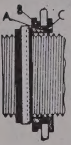
Fluted Stove-pipe Lens Cat. No. 331-125-★	Color	Plain Stove-Pipe Lens Cat. No. 331-125-★
0408-1191-443	Red	0408-1131-443
0408-1193-443	Amber	0408-1133-443
0408-1196-443	Yellow	0408-1136-443
0408-1197-443	Clear	0408-1137-443
. . . .	Clear†	0408-1117-443

FOR LOW VOLTAGE T-3-1/4 MINIATURE BAYONET LAMPS

0410-1191-403	Red	0410-1111-403§
0410-1192-403	Green	0410-1112-403§
0410-1193-403	Amber	0410-1113-403§
0410-1194-403	Blue	0410-1114-403§
0410-1195-403	White†	0410-1135-403§
0410-1196-403	Yellow	0410-1116-403§
0410-1197-403	Clear	0410-1117-403§

	1-9	10-24	25-99
0408 Series Net	$2.55	$2.31	$2.19
0410 Series Net	2.34	2.11	2.01

OIL-TIGHT ADAPTER SET



These are used for mounting any 1" Dialco assembly in the 1-3/16" diameter holes which are sometimes standard on industrial equipment.

Cat.
331-515-1316 **Net $ .68**

OIL-TIGHT ASSEMBLIES

FOR B7A NEON LAMPS

With candelabra screw base socket. May also be used with Herzog 4-watt T-4½ 115 volt lamp. Mounts in 1" hole. Overall size 1-3/16 x 2-7/32". Unfrosted lens. †Frosted back.

Cat. No. 331-103-★	Color	Net 1-9	10- 24	25- 99
3114-1231-403	Red	$3.49	$3.21	$3.00
3114-1233-403	Amber			
3114-1236-403	Yellow			
3114-1237-403	Clear			
3114-1217-403	Clear†			

HALF-INCH ENCLOSED
MINIATURE BAYONET

U.L. approved signal indicator assemblies with smooth faced lens in ½" white nickeled holders. Lens are removeable from front of panel for easy lamp insertion. Socket for T-3¼ miniature bayonet base lamps. Mounts in 11/16" hole on panels up to 3/8" thick. Overall depth 2¼". Black phenolic insulation. Less bulb.

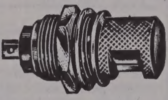
SOLDER LUGS

Cat. No. 331-81-★	Color	Net 1-9	10- 24	25- 99
0410-0111-102	Red	$1.27	$1.12	$1.07
0410-0112-102	Green			
0410-0135-102	White			
0410-0113-102	Amber			

SCREW TERMINALS

1310-0111-102	Red	$1.35	$1.21	$1.14
1310-0112-102	Green			
1310-0135-102	White			
1310-0113-102	Amber			

INSTRUMENT LIGHT



Has ¼" x 3/16" opening in side of metal cap. Emits light for instruments, meters, dials, etc. For midget flange base T-1¾ lamps. Mounts in 15/32" hole. Available with black nickel or polished chrome finish. Specify which is required when ordering. †Chrome finish.

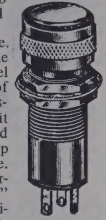
Cat. 331-4-★	Term.	Net 1-9	10- 24	25- 99
1930-2900-201	Solder	$2.09	$1.83	$1.69
1830-2900-201	Screw	2.43	2.12	1.96
1830-2900-301†	Screw	2.43	2.12	1.96
1930-2900-301†	Solder	2.09	1.83	1.69

WITH GLASS LENS

General purpose type. Metal lens holder unscrews for easy lamp replacement. Lens backs are frosted. Uses midget T-1¾ lamps. Has two solder terminals. Mounts in 15/32" hole. †Translucent, unfrosted. Furnished less lamp.

Cat. No. 331-111-★	Color	Net 1-9	10- 24	25- 99
3830-0111-201	Red	$2.13	$1.88	$1.73
3830-0112-201	Green			
3830-0113-201	Amber			
3830-0114-201	Blue			
3830-0135-201	White†			
3830-0116-201	Yellow			
3830-0117-201	Clear			

PRESS-TO-TEST



With patented bulb testing device and optional shutter dimming device. Cap is removeable from face of panel for easy insertion of lamps. A slight pressure on the face of the unit "breaks" the normal circuit and "makes" a test circuit. If lamp fails to light it is defective. Equipped with two lugs for normal circuit, and one for "test" circuit. Widely used in military and commercial aircraft, and in civilian industry. Provides concentrated 180° visible beam for daylight and an indirect "halo" light for night.

MIDGET 800 & 801 SERIES

Uses T-1¾ midget flanged base lamps. Mounts in 15/32" hole. Conforms to MS-25041-1 through MS25041-11. Overall size 5/8 x 1-5/8". Finish black alumilite. Less bulb.

WITH DIMMER

Cat. No. 331-801-★	Color	Net 1-9	10- 24	25- 99
1030-0337-504	Clear	$2.86	$2.52	$2.32
1030-0331-504	Red			
1030-0332-504	Green			
1030-0333-504	Amber			
1030-0334-504	Blue			

WITHOUT DIMMER

Cat. No. 331-800-★	Color	Net 1-9	10- 24	25- 99
1030-0337-504	Clear	$2.46	$2.17	$1.99
1030-0331-504	Red			
1030-0332-504	Green			
1030-0333-504	Amber			
1030-0334-504	Blue			

STANDARD 803 & 804 SERIES

Uses T-3¼ miniature bayonet base lamps. Mounts in 5/8" hole. Overall size 7/8" x 2¼". Conforms to MS25331-1 through MS-25331-8. Black alumilite finish. Less bulb.

WITH DIMMER

Cat. No. 331-804-★	Color	Net 1-9	10- 24	25- 99
1710-0337-504	Clear	$3.39	$2.97	$2.74
1710-0331-504	Red			
1710-0332-504	Green			
1710-0333-504	Amber			
1710-0334-504	Blue			

WITHOUT DIMMER

Cat. No. 331-803-★	Color	Net 1-9	10- 24	25- 99
1710-0337-504	Clear	$3.09	$2.72	$2.48
1710-0331-504	Red			
1710-0332-504	Green			
1710-0333-504	Amber			
1710-0334-504	Blue			

LAMP INSTALLER

These rubber lamp installers are used for easy installation or removal of lamps from hard-to-get spots in panel assemblies, etc. Type 506-0045 is for T-3¼ lamps on one end and T-4½ on the other. Type 506-0073 is for S-6 lamps on one end and T-3¼ on the other.

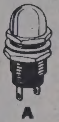
Cat. 331-506-0045
Cat. 331-506-0073 **Net Ea. $.33**

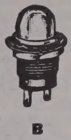
★Be sure to include complete Cat. No. i.e., 331-103-3101-1331-403.

DIALCO PILOT LIGHT ASSEMBLIES

SUB-MINIATURE ASSEMBLIES

T-1¾ BULBS





Uses midget flange base T-1¾ bulbs. These are available for voltages from 1.35 to 28 volts. Lamps are replaceable from the front. Made of brass with black nickel finish. Overall length 1¼". These assemblies conform to all applicable Military specs. They will withstand the usual vibration and corrosion tests. Phenolic insulation. Circuit completely insulated from panel. With two solder terminals. Less lamps.

FOR BACK INSERTION

Fig. A. Mounts from front or rear of panel in 15/32" clearance hole. Dome-shaped plastic lens.

Cat. No. 331-★	Color	Net Ea.
101-3830-0971-201	Red	1-9
101-3830-0972-201	Green	$1.60
101-3830-0973-201	Amber	
101-3830-0974-201	Blue	10-24
101-3830-0975-201	White	$1.40
101-3830-0976-201	Yellow	

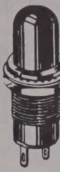
FOR FRONT INSERTION

Fig. B Mounts from front of panel. Mounts in 17/32" hole. Dome-shaped plastic lens.

Cat. No. 331-★	Color	Net Ea.
101-5030-0971-201	Red	1-9
101-5030-0972-201	Green	$1.60
101-5030-0973-201	Amber	
101-5030-0974-201	Blue	10-24
101-5030-0975-201	White	$1.40
101-5030-0976-201	Yellow	

★Be sure to include entire Cat. No. i.e., 331-101-3830-0971-201.

SUB-MINIATURE ASSEMBLIES



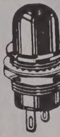
For front mounting in 15/32" clearance hole. Stovepipe lens of high heat plastic is removable for lamp replacement. Mounting bushing is black aluminite finished aluminum with rugged phenolic insulation and hot-dipped brass solder terminals. Units furnished less lamps.

NEON TYPES

For 105-125 v-ac/dc. Built-in 62K protective resistor. Mil. Std. Dwg. No. MS-25257-†. Molded lens gives 180° light spread. Overall height 1½". Wt. 1½ oz.

Cat. No. 331-★	†Mil.	Color
137-8836-0933-552	-2	Amber
137-8836-0931-552	-4	Red
137-8836-0937-552	-6	Clear
Assemblies	1-9	Ea. $2.56
Above	10-24	Ea. $2.23

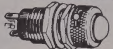
INCANDESCENT TYPES



For 1.3 to 28 volt type T-1¾ lamps. Mil. Std. Dwg. No. MS-25256-†. Shorter molded plastic lens than above. Overall height 1-3/32". Furnished less T-1¾ lamps.

Cat. No. 331-★	†Mil.	Color
162-8430-0933-502	-2	Amber
162-8430-0932-502	-4	Green
162-8430-0931-502	-6	Red
162-8430-0937-502	-8	Clear
162-8430-0975-502	-10	White
162-8430-0934-502	-12	Blue
Assemblies	1-9	Ea. $1.53
Above	10-24	Ea. $1.34

DIMMER ASSEMBLIES FOR MIDGET T-1¾ LAMPS



For use where light intensity must be varied. Turning the cap operates a mechanical shutter or a polaroid filter. Polaroid produces some reduced intensity at all setting but gives full diameter operation. Mechanical varies the opening size to complete "blackout."

1-TERMINAL TYPES

For use with one terminal grounded to panel. Screw terminal. Cap unscrews for replacing T-1¾ lamp. Overall size ½" x 1¼". Mounts in 15/32" dia. hole. Standard finish black nickel. Furnished less lamp. †Translucent, unfrosted.

POLAROID

Cat. No. 331-★	Color	Net Ea.
3-1830-0111-201	Red	1-9
3-1830-0112-201	Green	$2.53
3-1830-0113-201	Amber	
3-1830-0114 201	Blue	10-24
3-1830-0135-201	White†	$2.30
3-1830-0116-201	Yellow	
3-1830-0117-201	Clear	

BLACKOUT

Cat. No. 331-★	Color	Net Ea.
11-1830-0111-201	Red	1-9
11-1830-0112-201	Green	$2.53
11-1830-0113-201	Amber	
11-1830-0114-201	Blue	10-24
11-1830-0135-201	White†	$2.30
11-1830-0116-201	Yellow	
11-1830-0117-201	Clear	

★Be sure to include entire Cat. No. i.e., 331-1830-0111-201.

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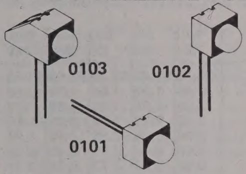
550 SERIES LED LOGIC STATE/FAULT INDICATORS



The 550 series indicators are designed for use in a wide variety of applications where solid state compatibility and ease in assembly and mounting are required. Such applications could include P/C board and panel mounting. These units are designed so that the LED in each indicator may be viewed from any angle eliminating the need for bending and aligning of the leads. The large LED lamp with a high light level makes these units convenient for best panel illumination. The 550-0103 is designed for installations where a more rigid assembly is required. Applications: Indicator light, panel illumination, logic state indicator, binary data display-permits stacking so that multiple functions can be displayed. For more complete specifications ask for Dialco LED Product Selector Guide SG731.

Cat. No.	Net 1-99	100-999
331-550-0101	$0.86	$0.64
331-550-0102		
331-550-0103		

SEE GENERAL INDEX for more DIALCO &
SYLVANIA LIGHT ASSEMBLIES also
GENERAL LISTING FOR LAMPS

LIMA RADIO PARTS COMPANY, INC.
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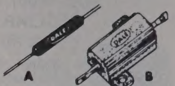
also GENERAL ELECTRIC - CHICAGO - SYLVANIA
MINIATURE LAMPS OF ALL TYPES

DALE PRECISION RESISTORS

MINIATURE PRECISION WIREWOUND RESISTORS

Dale resistors are made to MIL-R-26C Specs. Sealed in silicone, they are impervious to moisture; humidity and salt spray. Temperature coefficient is 0.00002/degree Centigrade. Completely welded construction from terminals to terminal. RS types are cylindrical with solid axial leads. RH types utilize molded construction in an extruded, aluminum housing for heat sink mounting to keep operating temperatures at a minimum.



RS½ ± 1%-½ WATT

Fig. A. Body .078" dia. x .312" long. Available in the stock resistance values from 1 to 4.9K ohms shown in the table below.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-RS-½	1 to 1K	$1.08	$0.85	$0.80	$0.75	$0.69
304-RS-½	1.1K to 4K	1.19	.95	.89	.83	.76
304-RS-½	4.1K to 4.9K	1.36	1.06	1.01	.93	.86

RS-1B ± 1%-1 WATT

Fig. A. Body .093" dia. x .575" long. Available in the stock resistance values from 1 to 15K ohms shown in the table below.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-RS-1B	.1 to .49	$2.18	$1.96	$1.74	$1.43	$1.32
304-RS-1B	.5 to .99	1.68	1.48	1.25	1.05	.96
304-RS-1B	1 to 1K	1.08	.85	.80	.75	.69
304-RS-1B	1.1K to 4K	1.19	.95	.89	.83	.76
304-RS-1B	4.1K to 15K	1.36	1.06	1.01	.93	.86

RS-2 ± 1%-3 WATTS

Fig. A. Body .250" dia. x .625" long. Available in the stock resistance values from .1 ohm to 47.1K ohms shown in the table below.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-RS-2	.1 to .49	$1.96	$1.76	$1.57	$1.29	$1.20
304-RS-2	.5 to .99	1.51	1.33	1.13	.95	.87
304-RS-2	1 to 1K	.83	.65	.62	.57	.53
304-RS-2	1.1K to 5K	.91	.73	.68	.63	.58
304-RS-2	5.1K to 10K	.95	.75	.70	.65	.62
304-RS-2	10.1K to 15K	.99	.78	.74	.69	.64
304-RS-2	15.1K to 20K	1.03	.83	.77	.73	.66
304-RS-2	20.1 to 40K	1.10	.87	.83	.76	.72
304-RS-2	40.1K to 47.1K	1.18	.95	.88	.83	.76

RS-5 ± 1%-5 WATTS

Fig. A. Body .312" dia. x .875" long. Available in the stock resistance values from .1 ohm to 95.2K ohms shown in the table below.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-RS-5	.1 to .49	$1.96	$1.76	$1.57	$1.29	$1.20
304-RS-5	.5 to .99	1.51	1.33	1.13	.95	.87
304-RS-5	1 to 1K	.83	.65	.62	.57	.53
304-RS-5	1.1K to 5K	.91	.73	.68	.63	.58
304-RS-5	5.1K to 10K	.95	.75	.70	.65	.62
304-RS-5	10.1K to 15K	.99	.78	.74	.69	.64
304-RS-5	15.1K to 20K	1.03	.83	.77	.73	.66
304-RS-5	20.1K to 40K	1.10	.87	.83	.76	.72
304-RS-5	40.1K to 55K	1.18	.95	.88	.83	.76
304-RS-5	55.1K to 75K	1.30	1.03	.97	.91	.84
304-RS-5	75.1K to 95.2K	1.43	1.14	1.08	1.00	.93

RS-10 ± 1%-10 WATTS

Fig. A. Body .375" dia. x 1.78" long. Available in the stock resistance values in the table below from .1 ohm to 273K ohms.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-RS-10	.1 to .49	$1.96	$1.76	$1.57	$1.29	$1.20
304-RS-10	.5 to .99	1.51	1.33	1.13	.95	.87
304-RS-10	1 to 1K	.83	.65	.62	.57	.53
304-RS-10	1.1K to 5K	.91	.73	.68	.63	.58
304-RS-10	5.1K to 10K	.95	.75	.70	.65	.62
304-RS-10	10.1K to 15K	.99	.78	.74	.69	.64
304-RS-10	15.1K to 20K	1.03	.83	.77	.73	.66
304-RS-10	20.1K to 40K	1.10	.87	.83	.76	.72
304-RS-10	40.1K to 55K	1.18	.95	.88	.83	.76
304-RS-10	55.1K to 75K	1.30	1.03	.97	.91	.84
304-RS-10	75.1K to 95.2K	1.43	1.14	1.08	1.00	.93

FOR OTHER TOLERANCES

For ± 0.50% Tolerance add 100% to above prices.
For ± 0.25% Tolerance add 150% to above prices.
For ± 0.10% Tolerance add 200% to above prices.
For ± 0.05% Tolerance add 300% to above prices.

RH-25 ± 1%-25 WATTS

Fig. B. Body .550" wide, .546" high, 1.062" long. Heavy lug terminals. Available from stock in the resistance values shown in the table below.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-RH-25	1 to 1K	$2.00	$1.60	$1.50	$1.40	$1.30
304-RH-25	1.1K to 5K	2.10	1.68	1.58	1.47	1.36
304-RH-25	5.1K to 10K	2.29	1.83	1.72	1.60	1.49
304-RH-25	10.1K to 12K	2.51	2.00	1.88	1.75	1.62
304-RH-25	12.1K to 15K	2.73	2.18	2.05	1.92	1.77
304-RH-25	15.1K to 25K	2.93	2.68	2.44	2.18	1.92
304-RH-25	25.1K to 40K	3.25	2.97	2.70	2.43	2.16
304-RH-25	40.1K to 50K	3.57	3.26	2.96	2.71	2.36
304-RH-25	50.1K to 60K	3.90	3.55	3.21	2.84	2.53

PH-25 ± 1%-25 WATTS

1-HOLE MOUNT

Essentially the same as the RH-25 listed above, but enclosed in a die-cast case with a threaded bushing for single hole mounting to heat sink.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-PH-25	1 to 1K	$2.24	$1.78	$1.67	$1.56	$1.45
304-PH-25	1.1K to 5K	2.35	1.88	1.77	1.65	1.53
304-PH-25	5.1K to 10K	2.56	2.05	1.93	1.88	1.66
304-PH-25	10.1K to 12K	2.81	2.24	2.10	1.96	1.82
304-PH-25	12.1K to 15K	3.06	2.44	2.30	2.15	1.98
304-PH-25	15.1K to 25K	3.28	3.00	2.74	2.44	2.18
304-PH-25	25.1K to 40K	3.64	3.33	3.03	2.72	2.42
304-PH-25	40.1K to 50K	4.00	3.65	3.32	3.04	2.64
304-PH-25	50.1K to 60K	4.37	3.98	3.60	3.18	2.84

RH-50 ± 1%-50 WATTS

Fig. B. Body .630" wide, .610" high, 1.968" long. Heavy lug terminals. Available from stock in the resistance values shown in the table below.

Cat. No.	Res. Ohms	Net 1-24	25-49	50-99	100-249	250-499
304-RH-50	1 to 5.9	$2.73	$2.48	$2.20	$2.02	$1.89
304-RH-50	6 to 1K	2.45	1.96	1.84	1.72	1.60
304-RH-50	1.1K to 5K	2.56	2.06	1.94	1.80	1.67
304-RH-50	5.1K to 10K	2.78	2.22	2.08	1.95	1.80
304-RH-50	10.1K to 20K	3.08	2.46	2.31	2.16	1.99
304-RH-50	20.1K to 55K	3.36	2.68	2.51	2.35	2.18
304-RH-50	55.1K to 75K	3.65	2.92	2.73	2.55	2.36
304-RH-50	75.1K to 100K	3.92	3.12	2.95	2.74	2.55
304-RH-50	100.1K to 125K	4.26	3.40	3.19	2.98	2.75
304-RH-50	125.1K to 150K	4.58	3.67	3.44	3.20	2.98
304-RH-50	150.1K to 175K	4.91	3.92	3.68	3.44	3.19

STOCK RESISTANCE VALUES

Ohms
.1
.2
.25
.5
.75
1
2
2.5
3
4
4.5
5
5.5
6
7
7.5
8
9
10
11
12
12.5
13
14
15

Ohms
16
17.5
20
21
22.5
25
27.5
30
31
33
35
37
40
42
45
47
50
55
60
65
70
75
80
85
90

Ohms
100
110
125
130
150
160
175
180
200
220
225
250
270
300
330
350
375
390
400
425
450
470
500
510
560

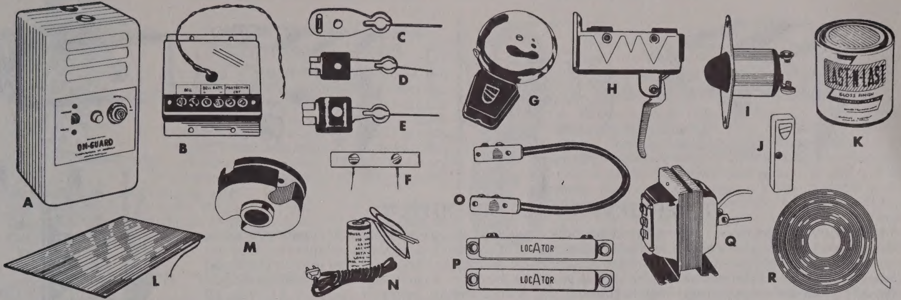
Ohms
600
620
650
700
725
750
760
800
850
900
950
1K
1.1K
1.2K
1.25K
1.3K
1.4K
1.5K
1.6K
1.75K
1.8K
2K
2.2K
2.5K
3K

Ohms
3.1K
3.5K
3.75K
4K
4.2K
4.3K
4.5K
4.7K
5K
5.3K
6K
6.2K
6.3K
6.8K
7K
7.5K
8K
8.2K
9K
10K
11K
12K
12.5K
13K
14K

Ohms
15K
15.5K
17.5K
20K
22.5K
25K
27.5K
30K
35K
40K
42K
45K
46K
47K
50K
55K
60K
65K
68K
70K
75K
80K
85K
90K
100K

Ohms
110K
120K
130K
140K
150K
160K
170K
175K

BURGLAR ALARM SYSTEMS



HOME BURGLAR ALARM
FITS ALL DOORS, MOUNTS IN MINUTES

Fig. A. Fully transistorized. Simply mount to the inside of door and the ON-GUARD alarm stands prepared to sound its shrill warning signal. Has the following features: Fits all doors. Mounts in minutes. No lock hole in door. No wiring necessary. Full transistorized. Long life battery. Tamperproof from outside. Completely self-contained. Exclusive Electronic Exit. Panic button. Constructed of heavy-gauge, anodized aluminum and measures 4½" x 8" x 3" in its attractive neutral sandcolored finish.

Cat. No. 424-DA-4	Home Burglar Alarm	**Net $39.95**

CUSTOMIZED BURGLAR ALARM SYSTEMS
FOR HOMES, STORES OR FACTORIES

Cameradio stocks the complete line of Electronic Locator Alarm Systems. These include burglar and fire warning systems as well as parts for the complete installation of these systems. Listed are only a few of the many items available. Ask for a free Electronic Locator Catalog No. 70.

CONTROL INSTRUMENTS

Fig. B. Opening any point of entry or crossing the protective house circuit will sound the alarm, which can only be silenced by means of the key lock switch (supplied with 2 keys). Designed for use with either a 1½ volt or 3 volt power source on the protective circuit and a 6 volt power source on the bell ringing circuit.

Cat. 424-700T	Closed circuit, transistorized control instrument for local alarms.	**Net $22.50**
Cat. 424-710T	Same as above except will turn on lights, sirens, etc.	**Net $25.50**
Cat. 424-700TD	Same as 700T, with delay for exit door.	**Net $29.95**
Cat. 424-650T	Open Circuit type.	**Net $11.95**

FOIL CONNECTORS

Cat. 424-787	Non-insulated, spring whisker (C).	**Net $0.14**
Cat. 424-788	Insulated, spring whisker (D)	**Net $0.15**
Cat. 424-788S	Insulated, short spring whisker (E)	**Net $0.15**
Cat. 424-5080	(F) Insulated glue block. Mounts directly to glass with adhesive backing.	**Net $0.40**

FOIL FOR WINDOWS & PANELS

Finest quality tissue interleaved (aluminum core) Fig. R.

Cat. 424-783	3/8" x .002" window foil. 1 lb. roll	**Net $3.90**
Cat. 424-783L	3/8" x .0015" U.L. window foil. 1 lb.	**Net $3.90**
Cat. 424-784	1" x .0025" panel or wall foil. 3 lb.	**Net $6.25**
Cat. 424-786	½" x .0025" panel or wall foil. 2 lb.	**Net $6.95**
Cat. 424-789L	Foil adhesive, extra hard finish when dry, more durable than varnish. Fig. K, ½ pint.	**Net $1.49**

6 INCH BELL FOR AC OR DC

Cat. 424-656	Fig. G. 6-12-V-AC or DC. Indoor use	**Net $7.49**

TRANSFORMER, 6-12-18 VOLTS AC

Cat. 424-687	Fig. Q. 5 watt transformer	**Net $4.60**

CONTACTOR AND DOOR TRIP

Cat. 424-607	Fig. I. Contactor, Open Circuit Systems (Bullet Nosed)	**Net $1.49**
Cat. 424-621	Fig. H. Door trip, for Closed Circuit Systems.	**Net $2.49**

SWITCHMATS FIG. L

"Locator" switch mats are made of safety tread rubber. Black only. Recommended for use on stairways, doorways, window sill, etc. Full tread on both sides. One set of connecting leads.

Cat.	**Description**	**Net**
424-723	9 x 11 switch mat, sealed	**$9.95**
424-724	18 x 24 switch mat, sealed	**13.95**
424-725	18 x 30 switch mat, sealed	**19.95**
424-726	24 x 24 switch mat, sealed	**22.50**
424-726A	24 x 30 switch mat, sealed	**24.95**
424-727	9 x 24 siwtch mat, sealed (Stairway)	**11.95**
424-727A	9 x 30 switch mat, sealed (Stairway)	**11.95**
424-728	30 x 36 switch mat, sealed	**29.95**
424-729	30 x 45 switch mat, sealed	**39.95**

DOOR CORDS FIG. O

Has extra flexible wire and special molded block for use on doors handling extremely heavy traffic. The 2 wired door cord terminal holes from both sides should it be necessary to reverse the screw locations. The 4 wired door cord is numbered and internally color coded.

Cat. 424-670	12" door cord 2 wire	**Net $1.05**
Cat. 424-670L	18" door cord 2 wire	**Net $1.35**
Cat. 424-671	12" door cord 4 wires	**Net $2.05**
Cat. 424-671L	18" door cord 4 wires	**Net $2.35**

THERMOSTATS-FIRE ALARM FIG. M

Made of white colored plastic and blends with any decor. Recommended application being 135 degrees in normal areas and 190 degrees in higher temperature areas, such as boiler rooms, attics, kitchens, etc. The recommended area of coverage being no more than 20" x 20" in area.

Cat. 424-1102	Open circuit, 135 degrees	**Net $2.75**
Cat. 424-1104	Open Circuit, 190 degrees	**Net $2.75**
Cat. 424-1103	Closed circuit, 135 degrees	**Net $2.75**
Cat. 424-1105	Closed circuit, 190 degrees	**Net $2.75**

3.6V POWER PACK FIG. N

Cat. 424-5045	For use at end of protective circuit. Eliminates replacing house circuit batteries.	**Net $9.95**

MINI VIBRATION CONTACT FIG. J

Closed circuit, screw driven, adjustable for use on wood, plaster board or other types of construction eliminating the need to foil complete areas.

Cat. 424-610	Mini Vibration Contact	**Net $3.95**

REED MAGNETIC CONTACT FIG. P

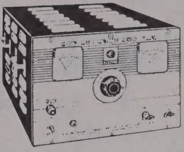
Cat. 424-637	Normally open for closed circuit	**Net $2.75**

MALLORY CRIME ALERT

An ultrasonic intrusion device with self-contained built-in alarm. Solid-state construction for long life. Covers up to 200 sq. ft. area. Adjustable sensitivity. Recommended for use where owner can de-activate and reset. Type CA1DC will automatically change over to DC in case of AC failure. Ideal for cars, boats, trailers, etc. Many accessories are available for a complete burgular alarm installation.

Cat. 47-CA1A	Deluxe Crime Alert	**Net $82.46**
Cat. 47-CA1DC	Operates from 120-v-ac or 12-18v-dc	**Net $82.46**

EPSCO PRODUCTS POWER SUPPLIES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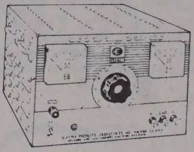
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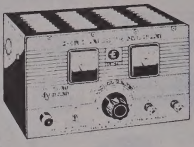
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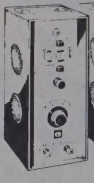
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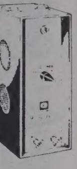
H

FILTERED VARIABLE D-C OUTPUT

The listing below provides a wide range or ruggedly constructed direct current power supplies for use in design, development, construction, service or maintenance of electronic or electrical equipment. They are popular in servicing auto, aircraft and marine radio communications equipment, and in laboratories and school rooms for experimental or educational purposes. Features include adjustable output voltages, large easy-to-read output meters, ripple filtering and isolated output terminals. Input: § 117-v-ac, 60 Hz; all others 117 v-ac 50/60 Hz. Model numbers ending in "R" indicate for rack mounting. †Output voltage change for each ampere of output current. *No load to full load unless otherwise specified. †† Meters on industrial supplies are ±2% accuracy, on general purpose supplies ±5%.

INDUSTRIAL POWER SUPPLIES

Cat. No.	See Fig.	------Output------		Load Reg.* (V/A)†	Max. Ripple	Meters Used††	D-C Imp.	Net Lbs.	Net Each
		Volts	Amps						
230-EF	D	0-28	0-5	0-9(1-5 a.)	1%	0-50 v, 0-6 a.	0.9Ω (1-5 a.)	21.0	**$137.50**
		0-14	0-5	0.6(1-5 a.)	1%		0.6Ω (1-5 a.)		
230-EFB	D	0-32	0-4	1.25	0.1%	0-40/20 v.	1.25 ohms	31.0	**192.50**
		0-16	0-8	1.0	0.1%	0-10 a.	1.0 ohms		
230-EFBR		0-32	0-4	1.25	0.1%	0-40/20 v.	1.25 ohms	34.0	**225.00**
		0-16	0-8	1.0	0.1%	0-10 a.	1.0 ohms		
230-GFL	D	0-125	0-5	1.5	0.5%	0-150 v, 0-5 a.	1.5 ohms	75.0	**350.00**
230-GFLR	–	0-125	0-5	1.5	0.5%	0-150 v, 0-5 a.	1.5 ohms	79.0	**385.00**
230-NFB	D	0-32	0-15	0.3	0.75%	0-50 v, 0-25 a.	0.3 ohms	71.0	**310.00**
230-NFBR	–	0-32	0-15	0.3	0.75%	0-50 v, 0-25 a.	0.3 ohms	82.0	**345.00**
230-PS-5	D	0-55	0-10	0.8	0.5%	0-75 v, 0-10 a.	0.8 ohms	60.0	**355.00**
230-PS-5R	–	0-55	0-10	0.8	0.5%	0-75 v, 0-10 a.	0.8 ohms	71.0	**385.00**
230-PS-1000-32	C	0-32	0-30	0.2	0.75%	0-50 v, 0-50 a.	0.2 ohms	85.0	**460.00**
230-PS-1000-55	C	0-55	0-20	0.5	0.5%	0-75 v, 0-25 a.	0.5 ohms	85.0	**465.00**
230-PS-1000-125	C	0-125	0-8	1.0	Less than 1%	0-150 v, 0-10 a.	1.0 ohms	120.0	**465.00**

GENERAL PURPOSE POWER SUPPLIES

230-D-612-T §	D	0-16	0-10	0.44(3-10a.)	0.5 @ 5 a.	0-20 v, 0-10 a.	0.44Ω (3-10 a.)	20.0	**99.50**
		0-8	0-10	0.3 (3-10 a.)	2.0 @ 10 a.		0.3Ω (3-10 a.)		
230-H	B	12 (adj.)	0-10	0.23 (3-10 a.)	5%	0-20 v, 0-30 a.	0.23Ω (3-10 a.)	29.0	**130.00**
		6 (adj.)	0-20	0.15 (3-20 a.)	5%		0.15Ω (3-20 a.)		
230-EC-2 §	G	0-16	0-5	1.8	0.5%	0-20 v, 0-10 a.	1.8 ohms	9.0	**74.50**
230-PS-30	B	12 (adj.)	0-30	0.12 (6-30 a.)	1%	0-20 v, 0-50 a.	0.27 ohms	56.0	**230.00**
230-PS-50	F	12 (adj.)	0-50	0.17	1%	0-20 v, 0-50 a.	0.17 ohms	75.0	**370.00**

OVERALL SIZES

Model	H x W x D	Model	H x W x D	Model	H x W x D
EF	7" x 12" x 8.125"	**NFBR**	10.5" x 19" x 14.25"	**D-612-T**	7" x 12" x 8.5"
EFB	7" x 12" x 8.125"	**PS-5**	9.75" x 14.25" square	**H**	7" x 12" x 8.5"
EFBR	8.75" x 19" x 8.5"	**PS-5R**	10.5" x 19" x 14.25"		10.75" x 4.375" x 6.5"
GFL	9.75" x 14.5" square	**PS-1000-32**	9.75" x 14.25" x 19.25"	**EC-2**	10.75" x 4.375" x 6.5"
GFLR	10.5" x 19" x 14.25"	**PS-1000-55**	9.75" x 14.25" x 19.25"	**PS-30**	9.75" x 14.25" square
NFB	9.75" x 14.25" square	**PS-1000-125**	9.75" x 14.25" x 19.25"	**PS-50**	9.75" x 14.25" square

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LOUD SPEAKERS

WE CAN SUPPLY YOUR EVERY NEED FOR LOUDSPEAKERS AND ACCESSORIES - WE HAVE REPLACEMENTS FOR MOST RADIOS - TV - TAPE RECORDERS - HI FIDELITY - EXTENSIONS - MUSIC SYSTEMS - PUBLIC ADDRESS - PLANT PAGING - ETC.

WE STOCK UTAH - UNIVERSITY - MAGITRAN - ELECTROVOICE - ARGOS & IMPORT REPLACEMENTS

ASK OUR SALESMEN FOR INFORMATION AND LISTINGS

AMPROBE® INSTRUMENTS

JUNIOR SNAP-AROUND VOLT-AMMETERS

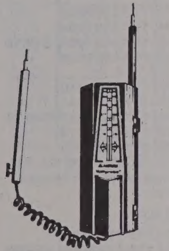
For use in service and maintenance, and for checking current loads in industrial power distribution systems. Snap-around jaws fit into hard-to-get-at places. Rugged, impact proof case has pin-jacks for voltmeter leads. Full-vision D'Arsonval meter movement with jewel bearings. Accuracy within 3%. Frequency 60 cps. Supplied with test leads. Less carrying case.

Cat. 205-Y25	0-25 Amps, 0-125/250 V-AC	**Net $25.85**
Cat. 205-Y500	0-100 Amps, 0-150/600 V-AC	**Net $25.85**
Cat. 205-Y550	0-50 Amps, 0-150/600 V-AC	**Net $25.85**

JUNIOR "YO" AMPROBES

These are the same as the "Y" Series above but have an additional scale for measuring resistance from 0-500 ohms, 25 ohms mid scale. With test leads, less carrying case.

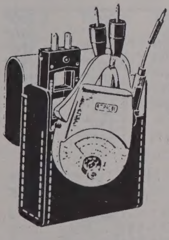
Cat. 205-YO"525"	0-25 A., 0-150/600 V., 0-500Ω	**Net $30.85**
Cat. 205-YO"550"	0-50 A., 0-150/600 V., 0-500Ω	**Net $30.85**
Cat. 205-YO"500"	0-100 A., 0-150/600 V., 0-500Ω	**Net $30.85**



VOLTPROBE VOLTAGE TESTER

Unique design makes Voltprobe virtually the only voltage tester that fits in a shirt pocket. Voltage levels are shown "Thermometer Style" by a series of LIT windows corresponding to each voltage level. Visual readout ends guesswork and wrong interpretation. Operates over a frequency range of 25 to 800 cycles. With 115VAC Receptacle check chart for inspecting outlets for proper wiring. Model VC carrying case optionsl at extra cost.

Cat. 205-VT-100	Ranges: 115/220/277/440/550 v-ac 115/220/400/600/750 v-dc	**Net $9.50**
Cat. 205-VT-124	Ranges: 115/220/277/440/550 v-ac 115/220/400/600/750 v-dc 24/48VAC	**Net $14.85**
Cat. 205-VC	Carrying Case for any Voltprobe	**Net $ 2.75**



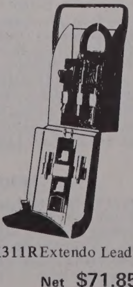
JUNIOR TEST-MASTER KITS

Each kit consists of a specially designed case containing one of the TM-YO Amprobe Junior Testers, and Amprobe Energizer, a battery attachment and test leads. Ohmmeter range; 25 ohms mid-scale.

Cat.	**AC-Amps**	**AC-Volts**	**Ohms**	**Net**
205-TM-YO"525"	0-25	0-150& 0-600	0-500	
205-TM-YO"550"	0-50	0-150 & 0-600	0-500	
205-TM-YO"500"	0-100	0-150 & 0-600	0-500	**$41.85**

TEST-MASTER KITS
WITH RS-3 AMPROBE

Rugged, sturdy cases contain the equipment needed to do all electrical testing with precision and accuracy.



MODEL TM-33A

Contains Amprobe RS-3, A-50-1 Decatran, A45L Energizer,VLK311R Extendo Leads and U case.

Cat. 205-TM-33A **Net $106.50**

MODEL TM-63

Contains Amprobe RS-3, A45L Energizer,VLK311R Extendo Leads and A Case.

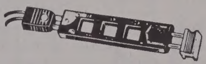
Cat. 205-TM-63 Test Master Kit **Net $71.85**

AMPROBE VOLT-AMMETERS
WITH ROTARY SCALE SELECTOR AND "POINTER-LOCK" METER

A clamp-on type volt-ammeter, the "RS" model series provides you with these outstanding features; Trigger operated, clamp-on transformer jaws permit current readings without interrupting electrical service. A rotary scale eliminates guesswork and reading errors since only one range at a time is visible in the magnifying, unbreakable window. A pointer-lock permits you to take measurements in hard to reach and darkened areas. You can lock the pointer in position and read the scale at another location. Model RS-3, RS-1000, and RS-1007 have a built-in ohmmeter. Accuracy on all ranges is ±3% F.S. Furnished with **VL-11R** leads and G case. Model RS-1000 and RS-1007 furnished with E case. *25 Ohm Midscale.

Cat.	**Ranges**		**Net**
No.	**Volts AC**	**Amps AC**	**Ea.**
205-RS-1	0-150/600	0-6/15/40/100	**$46.85**
205-RS-2	0-150/300	0-6/15/40/100	**46.85**
205-RS-3*	0-150/300/600	0-6/15/40/100/300	**59.85**
205-RS-300	0-150/300/600	0-6/15/40/100/300	**55.85**
205-RS-1000*	0-150/300/600	0-15/40/100/300/1000	**79.85**
205-RS-1007	0-150/300/750	0-15/40/100/300/1000	**79.85**

A-45L ENERGIZER



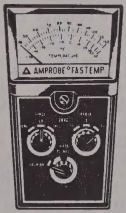
Permits current readings on permanently wired low-current electrical equipment by simplifying series connection. It increases the sensivity of your ammeter 5x or 10x for more precise readings directly at outlets by "splitting" double conductor line cords while the appliance is connected to the line. Capacity 10 amps.

Cat. 205-A-45L Energizer w/weatherproof pouch **Net $7.85**

REPLACEMENT TEST LEADS

Cat.	**Description**	**Net**
205-VL-11R	For all rotary scale Amprobes	**$3.00**
205-VL-22R	For models 300-600-1200	**4.90**
205-VL-144R	For Junior 10-25-50-100	**4.25**
205-VL-544R	For Junior 525-550-500	**4.25**

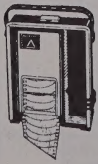
POUCHES AVAILABLE FOR ALL AMPROBE INSTRUMENTS



AMPROBE® FASTEMP® THERMOMETERS

Dual range, battery powered thermometer measures temperatures in seconds. Tapered shape fits either hand comfortable. Accommodates 3 probes that can be checked in quick succession by means of a selector switch. Press to read button extends battery life, locks in for continuous readings. Range overlap permits monitoring of fluctuating temperatures in that area without frequent switching of ranges. Supplied with one Universal Probe (RBT-12) for non-corrosive gaseous, liquid and surface temperatures. Accessory Immersion and Air Probes are available. Carrying case permits use of thermometer while in case, has storage space for 3 probes. Accuracy ± 2°F.; ± 1°C. Weight 10 ozs. Size 4-13/16" x 2-11/16" x 1-7/8".

Cat.		
205-T-150	-50° to +50°F., +40° to +150°F.	**Net $44.85**
205-T-151	+10°F to 110°F; +100°F to +250°F.	**Net $44.85**
205-RBT-11	Accessory Immersion Probe	**Net $ 8.95**
205-RBT-12	Replacement Universal Probe	**Net $ 8.95**
205-RBT-13	Accessory Air Probe	**Net $ 8.95**
205-FTC	Carrying Case	**Net $ 9.85**



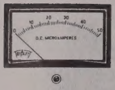
MINIATURE
CHART RECORDERS

Make up to 360 hours (1"/hr.) or permanent, smudge-free recordings on pressure-sensitive chart-paper rolls. 12"/hr. chart speed also available. Provision for "write-on" of pertinent reference data. Portable and panel-mounting models available for many ranges of voltage, current and temperature. Overall size 5-9/16" x 6-7/8" x 2". Weight 1.5 lbs. Standard drive mechanism operates from 115 v-ac 60 cps. Models for other voltages and frequencies also available. Basic model listed below. Many models are available.

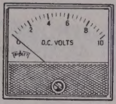
Cat. 205-LAA82 (0-250 A. AC) **Net $115.85**

For additional data see Amprobe Cat.RECT 1002

TRIPLETT PANEL METERS



HALF BEZEL



A

B

C

D-C MILLIAMMETERS

Full Range	Ohms Res.	Model 220-G Cat. 117-	Model 221-T Cat.	Model 227-T Cat.	Ea. 1-9
0-1	55	117-1019602	117-1012802	117-1012802	$19.10
0-5	8.5	117-1019608	117-1012508	117-1012808	
0-10	3.1	117-1019610	117-1012510	117-1012810	
0-25	2.0	117-1019613	117-1012513	117-1012813	$19.10
0-50	1.0	117-1019615	117-1012515	117-1012815	
0-100	.50	117-1019618	117-1012518	117-1012818	
0-200	.25	117-1019620	117-1012520	1.17-1012820	
0-500	.10	117-1019625	117-1012525	117-1012825	$19.10

D-C AMMETERS (50 mV)

0-1	. . .	117-1029602	117-1022502	117-1022802	$19.70
0-5	. . .	117-1029608	117-1022508	117-1022808	
0-10	. . .	117-1029610	117-1022510	117-1022810	
0-30	. . .	117-1029614	117-1022514	117-1022814	
0-50	. . .	117-1029615	117-1022515	117-1022815	

D-C MILLIVOLTMETERS

Full Scale	Ohms Res.	Model 220-G Cat.	Model 221-T Cat.	Model 227-T Cat.	Ea. 1-9
0-50	6.7	117-1039615	117-1032515	117-1032815	$19.70
0-100	13.5	117-1039618	117-1032518	117-1032818	
0-150	20.2	117-1039619	117-1032519	117-1032819	

D-C VOLTMETERS

Full Range	Ohms /V.	Model 220-G Cat.	Model 221-T Cat.	Model 227-T Cat.	Ea. 1-9
0-5	1000	117-1049608	117-1042508	117-1042808	$20.90
0-10	1000	117-1049610	117-1042510	117-1042810	
0-25	1000	117-1049613	117-1042513	117-1042813	
0-30	1000	117-1049614	117-1042514	117-1042814	$20.90
0-50	1000	117-1049615	117-1042515	117-1042815	
0-100	1000	117-1049618	117-1042518	117-1042818	
0-150	1000	117-1049619	117-1042519	117-1042819	
0-200	1000	117-1049620	117-1042520	117-1042820	
0-250	1000	117-1049621	117-1042521	117-1042821	
0-500	2000*	117-1049625	117-1042525	117-1042825	$29.40
0-1000	2000*	117-1049629	117-1042529	117-1942829	29.90
0-5000	2000*	117-1049633	117-1042533	117-1042833	35.80

*Furnished with external resistor board.

D-C MICROAMMETERS*

0-50	2300	117-1069615	117-1062515	117-1062815	$24.90
0-100	825	117-1069618	117-1062518	117-1062818	23.20
0-200	360	117-1069620	117-1062520	117-1062820	21.40
0-500	156	117-1069625	117-1062525	117-1062825	20.30

*Pivot and jewel movement.

D-C MICROAMMETERS*

Full Scale	Ohms Res.	Model 220-G Cat.117⋆	Model 221-T Cat.117⋆	Model 227-T Cat.117⋆	Ea. 1-9
0-5	15,000	8069608	8062508	8062808	$48.10
0-10	7,500	8069610	8062510	8062810	41.20
0-20	2,500	8069612	8062512	8062812	35.30
0-50	825	8069615	8062515	8062815	27.80
0-100	360	8069618	8062518	8062818	24.90
0-200	156	8069620	8062520	8062820	23.70
0-500	40	8069625	8062525	8062825	23.20
0-1000†	12.5	8069629	8062529	8062829	22.60
50-0-50	360	8069639	8062539	8062839	24.90
100-0-100	156	8069640	8062540	8062840	23.70
500-0-500	12.5	8069643	8062543	8062843	22.60

*Band suspension movement. †Reads 0-1 Milliampere.
⋆Include entire Cat. No. when ordering.

R-F THERMOAMMETERS

		Model 240-G	Model 241-T	Model 247-T	
0-1	.35	117-1079602	117-1072502	117-1072802	$23.70
0-1.5	.21	117-1079603	117-1072503	117-1072803	
0-5	.06	117-1079608	117-1072508	117-1072808	
0-10	.03	117-1079610	117-1072510	117-1072810	

2-1/2" PANEL METERS

Models 220-G, 230-G and 240-G (Fig. A) are molded plastic with a clear plastic window. Half bezels (1.69" x 3.09") permit mounting behind the panel. Models 221-T, 231-S and 240-T (Fig. B) and Models 227-T, 237-S and 247-T (Fig. C) are in black molded cases with glass windows. All have clear, easy-to-read scales.

Cat. 117-13A-233	Plastic Half Bezel	**Net Ea. $1.80**
Cat. 117-13A-238	Metal Half Bezel	**Net Ea. $2.20**

A-C VOLTMETERS*

	Ω/V.	Model 230-G	Model 231-S	Model 237-S	
0-10	10	117-1119610	117-1112510	117-1112810	$19.70
0-50	50	117-1119615	117-1112515	117-1112815	19.70
0-100	91	117-1119618	117-1112518	117-1112818	19.70
0-150	125	117-1119619	117-1112519	117-1112819	20.90
0-250	144	117-1119621	117-1112521	117-1112821	20.90
0-300	144	117-1119622	117-1112522	117-1112822	20.90
0-500	125†	117-1119625	117-1112525	117-1112825	33.60

*Iron Vane Movement. †External resistor board furnished.

A-C AMMETERS*

		Model 230-G	Model 231-S	Model 237-S	
0-1	.380	117-1109602	117-1102502	117-1102802	$18.50
0-2	.092	117-1109604	117-1102504	117-1102804	
0-3	.039	117-1109606	117-1102506	117-1102806	
0-5	.014	117-1109608	117-1102508	117-1102808	
0-10	.004	117-1109610	117-1102510	117-1102810	$18.50
0-15	.003	117-1109611	117-1102511	117-1102811	
0-25	.002	117-1109613	117-1102513	117-1102813	
0-30	.001	117-1109614	117-1102514	117-1102814	
0-50	.00035	117-1109615	117-1102515	117-1102815	

*Iron Vane Movements. For frequencies from 25 to 500 Hz. Ammeters are self-contained. For higher ranges use a 0-5 Amp-AC meter with an accessory current transformer.

A-C MILLIAMMETERS*

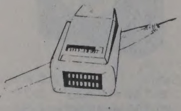
0-10	4000	117-1129610	117-1122510	117-1122810	$18.50
0-50	120	117-1129615	117-1122515	117-1122815	
0-100	40	117-1129618	117-1122518	117-1122818	$18.50
0-250	5.9	117-1129621	117-1122521	117-1122821	
0-500	1.55	117-1129625	117-1122525	117-1122825	

*Iron Vane Movements. For frequencies from 25 to 500 Hz.

2-1/2" PANEL METER DIMENSIONS

Model No.	See Fig.	Scale Lgth.	Meter Front H. L.	Barrel Dia.	L.
220-G	A	2.48"	2.390" x 2.770"	2.200"	1.390"
230G	A	2.11"	2.390" x 2.770"	2.200"	1.390"
240-G	A	2.48"	2.390" x 2.770"	2.200"	1.390"
221-T	B	1.76"	2.687" Dia.	2.203"	.937"
231-S	B	1.58"	2.687" Dia.	2.203"	1.312"
241-T	B	1.76"	2.687" Dia.	2.203"	.937"
227-T	C	1.76"	2.375" x 2.375"	2.156"	.750"
237-S	C	1.58"	2.375" x 2:375"	2.156"	1.375"
247-T	C	1.76"	2.375" x 2.375"	2.156"	.750"

ALCO 201 LOGIC CHECKER



A simplified solid state electronic instrument used to test DTL or TTL integrated circuits. No other attachments or auxiliary equipment is necessary. Self-contained and weighing only about an ounce, it can easily fit into a pocket. It requires no batteries or power cords because operating power is drawn from the circuit under test. No complicated controls or adjustments. Contains two rows of 8 light emitting diodes. Each LED corresponds to a pin; it illuminates in response to logic high (1) and emits no light when the pin is logic low (0), or in ground level position. All states of the I-C are visible simultaneously. Constructed for vigorous use and the carrying case is made from high impact vinyl, ideally suited for field, lab, production and inspection line testing. A set of 24 templates with standard circuitry designations are provided with each test.

Cat. 448-201 I-C Logic Checker w/24 templates **Net $99.95**

MODEL 300 LOGIC PROBE

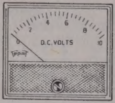
The self-contained Logic Probe traces logic levels and pulse activity through integrated circuits with instant response. It is economical, compact, and only slightly larger than a ballpoint pen. Can be used with any I.C. system using DTL or TTL. Requires only 5 VDC ±10% 30mA. from the system under test. Ideal for hard to reach circuits.

Cat. 448-300 Self Contained Logic Probe **Net $19.95**

TRIPLETT PANEL METERS

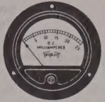
3½ INCH PANEL METERS

HALF BEZEL

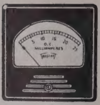


D

D1



E



F

Models 320-G, 340-G and 350-G (Fig. D) are molded plastic with a clear plastic window. Half bezels (2.27" x 3.83") permit mounting behind the panel. Models 320-GL, 340-GL, 350-GL and 330-GL (Fig. D1) are molded black plastic with a clear plastic window. Models 321-T, 331-S and 351-T (Fig. E) and 327-T, 337-S, 347-T (Fig. F) are in molded black cases with glass windows. All have clear, easy-to read scales. To order GL series meters use the same ratings and price schedule as the G series but change the seventh and eight numbers in the Cat. No. from 97 to 36, i.e. 117-1019702 for a 0-1 milliamp meter in the G series changes to 117-1013602 for the same meter in the GL series.

Cat. 117-13-239 Metal Half Bezel **Net Ea.$2.30**

D-C MICROAMMETERS (PIVOT & JEWEL)

Full Range	Ohms Res.	Model 320-G Cat. No.	Model 321-T Cat. No.	Model 327-T Cat. No.	Ea. 1-9
0-50	2.3K	117-1069715	117-1065615	117-1065715	$26.00
0-100	825	117-1069718	117-1065618	117-1065718	24.30
0-200	360	117-1069720	117-1065620	117-1065720	22.60
0-500	156	117-1069725	117-1065625	117-1065725	21.40

D-C MICROAMMETERS (SUSPENSION)

0-5	15K	117-8069708	117-8065608	117-8065708	$49.10
0-10	7.5K	117-8069710	117-8065610	117-8065710	42.20
0-20	2.5K	117-8069712	117-8065612	117-8065712	36.50
0-50	825	117-8069715	117-8065615	117-8065715	29.00
0-100	360	117-8069718	117-8065618	117-8065718	26.10
0-200	156	117-8069720	117-8065620	117-8065720	24.90
0-500	40	117-8069725	117-8065625	117-8065725	24.30
0-1000*	12.5	117-8069729	117-8065629	117-8065729	23.70
50-0-50	360	117-8069739	117-8065639	117-8065739	26.10
100-0-100	156	117-8069740	117-8065640	117-8065740	24.90
500-0-500	12.5	117-8069743	117-8065643	117-8065743	23.70

*Reads 0-1 milliampere.

D-C MILLIAMMETERS

0-1	55	117-1019702	117-1015602	117-1015702	$20.30
0-5	8.5	117-1019708	117-1015608	117-1015708	
0-10	3.1	117-1019710	117-1015610	117-1015710	
0-25	2.0	117-1019713	117-1015613	117-1015713	
0-50	1.0	117-1019715	117-1015615	117-1015715	
0-100	0.5	117-1019718	117-1015618	117-1015718	
0-200	0.25	117-1019720	117-1015620	117-1015720	
0-500	0.1	117-1019725	117-1015625	117-1015725	

D-C AMMETERS

0-1	117-1029702	117-1025602	117-1025702	$20.90
0-5	117-1029708	117-1025608	117-1025708	
0-10	117-1029710	117-1025610	117-1025710	
0-30	117-1029714	117-1025614	117-1025714	
0-50	117-1029715	117-1025615	117-1025715	

A-C MILLIAMMETERS

Full Range	Ohms Res.	Model 330-G Cat. No.	Model 331-S Cat. No.	Model 337-S Cat. No.	Ea. 1-9
0-10	4K	117-1129710	117-1125610	117-1125710	$20.30
0-50	120	117-1129715	117-1125615	117-1125715	
0-100	40	117-1129718	117-1125618	117-1125718	
0-250	5.9	117-1129721	117-1125621	117-1125721	
0-500	1.55	117-1129725	117-1125625	117-1125725	

A-C AMMETERS

0-1	.38	117-1109702	117-1105602	117-1105702	$20.90
0-2	.092	117-1109704	117-1105604	117-1105704	
0-3	.039	117-1109706	117-1105606	117-1105706	
0-5	.014	117-1109708	117-1105608	117-1105708	
0-10	.004	117-1109710	117-1105610	117-1105710	
0-15	.003	117-1109711	117-1105611	117-1105711	
0-25	.002	117-1109713	117-1105613	117-1105713	
0-30	.001	117-1109714	117-1105614	117-1105714	
0-50	.00035	117-1109715	117-1105615	117-1105715	

D-C MILLIVOLTMETERS (PIVOT & JEWEL)

Full Range	Ohms Res.	Model 320-G Cat No.	Model 321-T Cat. No.	Model 327-T Cat. No.	Ea. 1-9
0-50	6.7	117-1039715	117-1035615	117-1035715	$20.90
0-100	13.5	117-1039718	117-1035615	117-1035718	
0-150	20.2	117-1039719	117-1035619	117-1035719	

D-C MILLIVOLTMETERS (SUSPENSION)

Full Range	Ohms Res.	Model 320-G Cat. No.	Model 321-T Cat. No.	Model 327-T Cat. No.	Ea. 1-9
0-5	10	117-8039708	117-8035608	117-8035708	$37.50
0-10	23	117-8039710	117-8035610	117-8035710	34.10
0-15	35	117-8039711	117-8035611	117-8035711	34.10
0-25	48	117-8039713	117-8035613	117-8035713	29.40

D-C VOLTMETERS (1000 OHMS/VOLT)

Full Range	Model 320-G Cat. No.	Model 321-T Cat. No.	Model 327-T Cat. No.	Ea. 1-9
0-5	117-1049708	117-1045608	117-1045708	$22.10
0-10	117-1049710	117-1045610	117-1045710	22.10
0-25	117-1049713	117-1045613	117-1045713	22.10
0-30	117-1049714	117-1045614	117-1045714	22.10
0-50	117-1049715	117-1045615	117-1045715	22.10
0-100	117-1049718	117-1045618	117-1045718	22.10
0-150	117-1049719	117-1045619	117-1045719	22.10
0-200	117-1049720	117-1045620	117-1045720	22.10
0-250	117-1049721	117-1045621	117-1045721	22.10
0-500	117-1049725	117-1045625	117-1045725	22.60
0-1000*	117-1049729	117-1045629	117-1045729	31.10
0-5000*	117-1049733	117-1045633	117-1045733	37.00

*2000 ohms/volt; external multipler box furnished.

A-C VOLTMETERS

Full Range	Ohms Res.	Model 330-G Cat. No.	Model 331-S Cat. No.	Model 337-S Cat. No.	Ea. 1-9
0-10	10	117-1119710	117-1115610	117-1115710	$19.70
0-50	50	117-1119715	117-1115615	117-1115715	19.70
0-100	91	117-1119718	117-1115618	117-1115718	19.70
0-150	125	117-1119719	117-1115619	117-1115719	20.90
0-250	144	117-1119721	117-1115621	117-1115721	20.90
0-300	144	117-1119722	117-1115622	117-1115722	20.90
0-500*	125	117-1119725	117-1115625	117-1115725	33.60

*External multiplier box furnished.

A-C VOLTMETERS (RECTIFIER TYPE)

Full Range	Ohms/ Volt	Model 350-G Cat. No.	Model 351-T Cat. No.	Model 357-T Cat. No.	Ea. 1-9
0-5	1000	117-1179708	117-1175608	117-1175708	$29.00
0-10	1000	117-1179710	117-1175610	117-1175710	
0-50	1000	117-1179715	117-1175615	117-1175715	
0-150	1000	117-1179719	117-1175619	117-1175719	
0-300	1000	117-1179722	117-1175622	117-1175722	

RF THERMOAMMETERS

Full Range	Ohms Res.	Model 340-G Cat. No.	Model 341-T Cat. No.	Model 347-T Cat. No.	Ea. 1-9
0-1	.35	117-1079702	117-1075602	117-1075702	$23.70
0-1.5	.21	117-1079703	117-1075603	117-1075703	
0-5	.06	117-1079708	117-1075608	117-1075708	
0-10	.03	117-1079710	117-1075610	117-1075710	

DECIBEL METERS

Full Range	Model 350-G Cat. No.	Model 351-T Cat. No.	Model 357-T Cat. No.	Ea. 1-9
dB	117-1089750	117-1085650	117-1085750	$30.10
dB illum.	....	117-1085651	117-1085751	33.00

VOLUME UNIT METERS

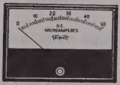
Full Range	Model 350-G Cat. No.	Model 351-T Cat. No.	Model 357-T Cat. No.	Ea. 1-9
A Scale	117-1099746	117-1095646	117-1095746	$34.80
A Scale Illum.	....	117-1095647	117-1095747	37.60
B Scale	117-1099748	117-1095648	117-1095748	34.80
B Scale Illum.	....	117-1095649	117-1095749	37.60

TRIPLETT PANEL METERS

3½ INCH PANEL METER DIMENSIONS

Model No.	See Scale Fig.	Lgth.	Flange H. x L.	Barrel Dia.	Barrel L.
320-G, 340-G, 350-G	D	3.16"	2.99" x 3.50"	2.75"	1.39"
320-GL, 340-GL, 350-GL	D1	3.16"	3.74" x 3.23"	2.16"	1.10"
330-G	D	2.68"	2.99" x 3.50"	2.75"	1.39"
330-GL	D1	2.62"	3.74" x 3.23"	2.16"	1.10"

Model No.	See Scale Fig.	Lgth.	Flange L. x H.	Barrel Dia.	Barrel L.
321-T, 341-T, 351-T	E	2.44"	3.50" Dia.	2.75"	0.920"
331-S	E	2.22"	3.50" Dia.	2.75"	1.312"
327-T, 347-T, 357-T	F	2.49"	3.00" x 3.00"	2.75"	0.987"
337-S	F	2.22"	3.00" x 3.00"	2.75"	1.375"



3½"R

3-1/2" SERIES "R"

A popular series with a modern, striking combination of transparent and black molded plastic. Fluted shroud, shatterproof plastic window. Self-shielded, bar-ring D-C movements for faster response, greater ruggedness. Mounting is by two 6-32 studs on 2.936" centers on horizontal center line.

3-1/2" "R" DIMENSIONS

Model No.	Scale Lgth.	Flange W. x L.	Barrel Dia. x L.
320-R	2.96"	2.673" x 3.954"	2.156" x 1.311"
330-R	2.50"	2.673" x 3.954"	2.156" x 1.311"

D-C MA-METERS

Full Range	Ohms Res.	320-R Cat. 117-★	Ea. 1-9
0-1	55	1015102	$20.30
0-5	8.5	1015108	
0-10	3.1	1015110	
0-50	1.0	1015115	
0-100	.50	1015118	
0-200	.25	1015120	
0-500	.10	1015125	

D-C μA-METERS*

Full Range	Ohms Res.	320-R Cat. 117-★	Ea. 1-9
0-50	2300	1065115	$26.00
0-100	825	1065118	24.30
0-200	360	1065120	22.60
0-500	156	1065125	21.40

*Pivot & jewel type.

D-C μA-METERS†

Full Range	Ohms Res.	320-R Cat. 117-★	Ea. 1-9
0-5	15,000	8065108	$49.10
0-10	7,500	8065110	42.20
0-20	2,500	8065112	36.50
0-50	825	8065115	29.00
0-100	360	8065118	26.10
0-200	156	8065120	24.90
0-500	40	8065125	24.30

†Suspension type.

D-C VOLTMETERS

0-5	1000 Ω/V.	1045108	$22.10
0-10		1045110	
0-25		1045113	
0-50		1045115	
0-150		1045119	
0-500		1045125	$22.60

A-C VOLTMETERS†

Full Range	Ohms /V.	330-R Cat. 117-★	Ea. 1-9
0-10	10	1115110	$19.70
0-50	50	1115115	19.70
0-150	125	1115119	20.90
0-300	144	1115122	20.90

†Iron vane type. *With external resistor board.

A-C MA-METERS†

Full Range	Ohms Res.	330-R Cat. 117-★	Ea. 1-9
0-10	4000	1125110	$19.70
0-100	40	1125118	
0-500	1.55	1125125	

†Iron Vane type.
★Include entire Cat. No. when ordering.

A-C AMMETERS†

Full Range	Ohms Res.	330-R Cat. 117-★	Ea. 1-9
0-1	.380	1105102	$19.70
0-5	.014	1105108	
0-10	.004	1105110	
0-15	.003	1105111	
0-25	.002	1105113	
0-30	.001	1105114	
0-50	.00035	1105115	

†Iron vane type.

D-C MV-METERS

Full Range	Ohms Res.	320-R Cat. 117-★	Ea. 1-9
0-50	6.7	1035115	$20.90

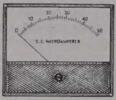
1 to 9 Meters Prices as shown
10 to 24 Meters Price less 10%
25 to 49 Meters Price less 15%

4½ INCH PANEL METERS

Models 420-G, 430-G, 440-G and 450-G (Fig. G) are in molded plastic cases with a clear, unbreakable plastic window. Half Bezels are available for mounting "G" Models behind the panel. Models 420-GL, 440-GL, 450-GL and 430-GL (Fig. G1) are in molded black plastic cases with a clear, unbreakable plastic window. Models 420, 430, 440 and 450 (Fig. H) are in molded black cases with a glass window. 117-1067215 for the same meter in the GL series.

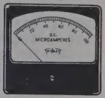
Cat. 117-13-236 Metal Half Bezel **Net Ea. $2.30**

HALF BEZEL



G

G1



H

D-C MICROAMMETERS (PIVOT & JEWEL)

Full Range	Ohms Res.	Model 420 Cat. No.	Model 420-G Cat. No.	Model 420-GL Cat. No.	Net 1-9
0-50	2.3K	117-1066215	117-1069815	117-1067215	$25.90
0-100	825	117-1066218	117-1069818	117-1067218	24.30
0-200	360	117-1066220	117-1069820	117-1067220	22.60
0-500	156	117-1066225	117-1069825	117-1067225	21.50

D-C MICROAMMETERS (SUSPENSION)

Full Range	Ohms Res.	Model 420 Cat. No.	Model 420-G Cat. No.	Model 420-GL Cat. No.	Net 1-9
0-5	15K	117-8066208	117-8069808	117-8067208	$47.90
0-10	7.5K	117-8066210	117-8069810	117-8067210	41.40
0-20	2.5K	117-8066212	117-8069812	117-8067212	35.80
0-50	825	117-8066215	117-8069815	117-8067215	28.70
0-100	360	117-8066218	117-8069818	117-8067218	25.90
0-200	156	117-8066220	117-8069820	117-8067220	24.80
0-500	40	117-8066225	117-8069825	117-8067225	24.30
0-1000*	12.5	117-8066229	117-8069829	117-8067229	23.70
50-0-50	360	117-8066239	117-8069839	117-8067239	25.90
100-0-100	156	117-8066240	117-8069840	117-8067240	24.80
500-0-500	1.7K	117-8066243	117-8069843	117-8067243	23.70

*Reads 0-1 milliampere.

D-C MILLIAMMETERS

Full Range	Ohms Res.	Model 420 Cat. No.	Model 420-G Cat. No.	Model 420-GL Cat. No.	Net 1-9
0-1	55	117-1016202	117-1019802	117-1017202	$20.40
0-5	8.5	117-1016208	117-1019808	117-1017208	
0-10	3.1	117-1016210	117-1019810	117-1017210	
0-25	2	117-1016213	117-1019813	117-1017213	
0-50	1	117-1016215	117-1019815	117-1017215	
0-100	0.5	117-1016218	117-1019818	117-1017218	
0-200	0.25	117-1016220	117-1019820	117-1017220	
0-500	0.1	117-1016225	117-1019825	117-1017225	

D-C AMMETERS

Full Range	Model 420 Cat. No.	Model 420-G Cat. No.	Model 420-GL Cat. No.	Net 1-9
0-1	117-1026202	117-1029802	117-1027202	$21.00
0-5	117-1026208	117-1029808	117-1027208	
0-10	117-1026210	117-1029810	117-1027210	
0-30	117-1026214	117-1029814	117-1027214	
0-50	117-1026215	117-1029815	117-1027215	

A-C MILLIAMMETERS

Full Range	Ohms Res.	Model 430 Cat. No.	Model 430-G Cat. No.	Model 430-GL Cat. No.	Net 1-9
0-10	4K	117-1126210	117-1129810	117-1127210	$19.90
0-50	120	117-1126215	117-1129815	117-1127215	
0-100	40	117-1126218	117-1129818	117-1127218	
0-250	5.9	117-1126221	117-1129821	117-1127221	
0-500	1.55	117-1126225	117-1129825	117-1127225	

A-C AMMETERS

Full Range	Ohms Res.	Model 430 Cat. No.	Model 430-G Cat. No.	Model 430-GL Cat. No.	Net 1-9
0-1	.38	117-1106202	117-1109802	117-1107202	$19.90
0-2	.092	117-1106204	117-1109804	117-1107204	
0-3	.039	117-1106206	117-1109806	117-1107206	
0-5	.014	117-1106208	117-1109808	117-1107208	
0-10	.004	117-1106210	117-1109810	117-1107210	
0-15	.003	117-1106211	117-1109811	117-1107211	
0-25	.002	117-1106213	117-1109813	117-1107213	
0-30	.001	117-1106214	117-1109814	117-1107214	
0-50	.00035	117-1106215	117-1109815	117-1107215	

CONTINUED ON NEXT PAGE.

TRIPLETT PANEL METERS

4-1/2" PANEL METERS CONTINUED

D-C MILLIVOLTMETERS (PIVOT & JEWEL)

Full Range	Ohms Res.	Model 420 Cat. No.	Model 420-G Cat. No.	Model 420-GL Cat. No.	Net 1-9
0-50	6.7	117-1036215	117-1039815	117-1037215	$22.10
0-100	13.5	117-1036218	117-1039818	117-1037218	
0-150	20.2	117-1036219	117-1039819	117-1037219	

D-C MILLIVOLTMETERS (SUSPENSION)

Full Range	Ohms Res.	Model 420 Cat. No.	Model 420-G Cat. No.	Model 420-GL Cat. No.	Net 1-9
0-5	10	117-8036208	117-8039808	117-8037208	$39.70
0-10	23	117-8036210	117-8039810	117-8037210	36.30
0-15	35	117-8036211	117-8039811	117-8037211	36.30
0-25	48	117-8036213	117-8039813	117-8037213	30.50

D-C VOLTMETERS (1000 OHMS/VOLT)

Full Range	Model 420 Cat. No.	Model 420-G Cat. No.	Model 420-GL Cat. No.	Net 1-9
0-5	117-1046208	117-1049808	117-1047208	$23.20
0-10	117-1046210	117-1049810	117-1047210	23.20
0-25	117-1046213	117-1049813	117-1047213	23.20
0-30	117-1046214	117-1049814	117-1047214	23.20
0-50	117-1046215	117-1049815	117-1047215	23.20
0-100	117-1046218	117-1049818	117-1047218	23.20
0-150	117-1046219	117-1049819	117-1047219	23.20
0-200	117-1046220	117-1049820	117-1047220	23.20
0-250	117-1046221	117-1049821	117-1047221	23.20
0-500	117-1046225	117-1049825	117-1047225	23.70
0-1000*	117-1046229	117-1049829	117-1047229	32.20
0-5000*	117-1046233	117-1049833	117-1047233	38.10

*2000 ohms/volt; external multiplier box furnished.

A-C VOLTMETERS

Full Range	Ohms Res.	Model 430 Cat. No.	Model 430-G Cat. No.	Model 430-GL Cat. No.	Net 1-9
0-10	10	117-1116210	117-1119810	117-1117210	$20.90
0-50	50	117-1116215	117-1119815	117-1117215	20.90
0-100	91	117-1116218	117-1119818	117-1117218	20.90
0-150	125	117-1116219	117-1119819	117-1117219	22.10

Continued In Next Column

A-C VOLTMETERS CONT'D.

Full Range	Ohms Res.	Model 430 Cat. No.	Model 430-G Cat. No.	Model 430-GL Cat. No.	Net 1-9
0-250	144	117-1116221	117-1119821	117-1117221	$22.10
0-300	144	117-1116222	117-1119822	117-1117222	22.10
0-500*	125	117-1116225	117-1119825	117-1117225	34.80
90-130	45	117-1116244	117-1119844	117-1117244	36.30

*External multiplier box furnished.

A-C VOLTMETERS (RECTIFIER TYPE)

Full Range	Ohms /Volt	Model 450 Cat. No.	Model 450-G Cat. No.	Model 430-GL Cat. No.	Net 1-9
0-5	1000	117-1176208	117-1179808	117-1177208	$30.10
0-10	1000	117-1176210	117-1179810	117-1177210	
0-50	1000	117-1176215	117-1179815	117-1177215	
0-150	1000	117-1176219	117-1179819	117-1177219	
0-300	1000	117-1176222	117-1179822	117-1177222	

RF THERMOAMMETERS

Full Range	Ohms Res.	Model 440 Cat. No.	Model 440-G Cat. No.	Model 440-GL Cat. No.	Net 1-9
0-1	.35	117-1076202	117-1079802	117-1077202	$26.00
0-1.5	.21	117-1076203	117-1079803	117-1077203	
0-5	.06	117-1076208	117-1079808	117-1077208	
0-10	.03	117-1076210	117-1079810	117-1077210	

DECIBEL METERS

Range	Model 450 Cat. No.	Model 450-G Cat. No.	Model 450-GL Cat. No.	Net 1-9
dB	117-1086250	117-1089850	117-1087250	$31.30
dB Illum.	117-1086251	. . . .	. . . .	34.20

VOLUME UNIT METERS

Range Range	Model 450 Cat. No.	Model 450-G Cat. No.	Model 450-GL Cat. No.	Net 1-9
A Scale	117-1096246	117-1099846	117-1097246	$35.90
A Scale Illum.	117-1096247	. . . .	. . . .	38.90
B Scale	117-1096248	117-1099848	117-1097248	35.90
B Scale Illum.	117-1096249	. . . .	. . . .	38.90

4½ INCH PANEL METER DIMENSIONS

Model No.	See Fig.	Scale Lgth.	Flange L. H.	Barrel Dia. L.
420, 440, 450	H	4.04"	4.63" x 4.19"	2.75" x 0.84"
430	H	3.60"	4.63" x 4.19"	2.75" x 0.97"
420-G, 440-G, 450-G	G	4.03"	4.55" x 4.07"	2.75" x 0.55"
430-G	G	3.43"	4.55" x 4.07"	2.75" x 0.55"
420-GL, 440-GL, 450-GL	G1	4.03"	4.71" x 4.22"	2.31" x 1.11"
430-GL	G1	3.36"	4.71" x 4.22"	2.31" x 1.11"

4-1/2" SERIES "R" PANEL METERS

4½"R

Modern case design, using a striking combination of transparent and black molded plastic. Fluted shroud, with shatterproof clear plastic window. Provides a longer scale in limited panel space. D-C instruments incorporate a self-shielded, bar-ring movement for faster response, greater accuracy and ruggedness. Scale length: DC, RF and AC Rectifier types 3.456"; AC Iron Vane Types 2.874". Front bezel, all types, 4.5" wide x 2.97" high. Barrel diameter 2.203", depth behind panel front 1.311". Mounting is by two 6-32 studs spaced 3.5" c.c. on horizontal center line of bezel.

D-C MA-METERS

Full Range	Ohms Res.	420-R Cat. 117-⋆	Ea. 1-9
0-1	55	1017802	$21.40
0-5	8.5	1017808	
0-10	3.1	1017810	
0-50	1.0	1017815	
0-100	.50	1017818	
0-200	.25	1017820	
0-500	.10	1017825	

D-C μA-METERS*

Full Range	Ohms Res.	320-R Cat. 117-⋆	Ea. 1-9
0-50	2300	1067815	$27.20
0-100	825	1067818	25.50
0-200	360	1067820	23.70
0-500	156	1067825	22.60

*Pivot & jewel movement.
⋆Include entire Cat. No. when ordering.

D-C μA-METERS†

Full Range	Ohms Res.	420-R Cat. 117-⋆	Ea. 1-9
0-5	15k	8067808	$50.30
0-10	7.5k	8067810	43.50
0-20	2.5k	8067812	37.60
0-50	825	8067815	30.10
0-100	360	8067818	27.20
0-200	156	8067820	26.00
0-500	40	8067825	25.50

†Suspension type.

D-C VOLTMETERS

0-5	1000 Ω/V.	1047808	$23.20
0-10		1047810	
0-25		1047813	
0-50		1047815	
0-100		1047819	
0-200		1047822	
0-500		1047825	$23.70

A-C VOLTMETERS†

Full Range	Ohms /V.	430-R Cat. 117-⋆	Ea. 1-9
0-10	10	1117810	$20.90
0-50	50	1117815	20.90
0-150	125	1117819	22.10
0-300	144	1117822	22.10
0-500	125*	1117825	34.80

†Iron vane type. *With external resistor board.

A-C MA-METERS†

Full Range	Ohms Res.	430-R Cat. 117-⋆	Ea. 1-9
0-10	4k	1127810	$20.90
0-100	40	1127818	
0-500	1.55	1127825	

†Iron vane type.

A-C AMMETERS†

Full Range	Ohms Res.	430-R Cat. 117-⋆	Ea. 1-9
0-1	.380	1107802	$20.90
0-5	.014	1107808	
0-10	.004	1107810	
0-15	.003	1107811	
0-25	.002	1107813	
0-30	.001	1107814	
0-50	.00035	1107815	

†Iron vane type.

D-C MV-METERS

Full Range	Ohms Res.	420-R Cat. 117-⋆	Ea. 1-9
0-50	6.7	1037815	$22.10

1-9 Meters	Prices as shown
10-24 Meters	Price less 10%
25-49 Meters	Price less 15%

TRIPLETT TEST EQUIPMENT

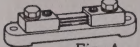


Fig. A

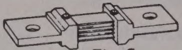


Fig. C

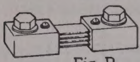


Fig. B

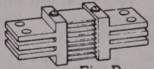


Fig. D

SWITCHBOARD SHUNTS
FOR D-C AMMETERS

For use with 0-50 Millivolt meters. When shunt and meter are ordered at the same time the meter full scale reading will be the same as the shunt rating. Supplied with 5 foot leads.

Cat.	Fig.	Amps	Net	Cat.	Fig.	Amps	Net
117-91A-599	A	1	$12.10	117-91A-608	C	500	$21.40
117-91A-600	A	2	12.10	117-91A-609	C	600	25.50
117-91A-601	A	5	12.10	117-91A-610	C	750	32.30
117-91A-602	A	10	12.10	117-91A-611	C	800	32.30
117-91A-603	A	20	12.10	117-91A-585	D	1000	63.80
117-91A-604	A	50	12.10	117-91A-586	D	1200	63.80
117-91A-605	A	100	12.10	117-91A-587	D	1500	71.20
117-91A-606	A	150	12.10	117-91A-588	D	2000	79.40
117-91A-607	A	200	12.10	117-91A-589	D	2500	85.90
117-91A-593	B	250	14.20	117-91A-590	D	3000	130.20
117-91A-594	B	300	14.20	117-91A-591	D	4000	167.80
117-91A-595	B	400	17.30	117-91A-592	D	5000	198.50

THERMOCOUPLES

Cat. No.	† Type	Over-Braid	Approx. Lgth.	Wire Size	Resistance	Net Each
117-72-99	J	GC	137"	24 AWG	10 ohms	$6.60
117-72-100	J*	GC	162"	20 AWG	5 ohms	8.80
117-72-101	J	SS	137"	24 AWG	10 ohms	11.00
117-72-102	J	GC	54"	30 AWG	10 ohms	4.90
117-72-103	K	GC	205"	20 AWG	10 ohms	13.20
117-72-104	K	SS	206"	20 AWG	10 ohms	19.80
117-72-105	K	GC	50"	26 AWG	10 ohms	4.90
117-72-106	K	SS	50"	26 AWG	10 ohms	7.80

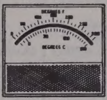
Overbraid: GC glass cloth; SS stainless steel.

CURRENT TRANSFORMERS

Do-Nut Current Transformers for use with a 0-5 Ampere A-C Ammeter for reading high A-C Current or for remote placing of the meter. When the Do-Nut Transformer and Meter are ordered together the full scale reading of the meter will be the same as the rating of the transformer.

Cat. No.	Pri. Amps	Ea. 1-9	Cat. No.	Pri. Amps	Ea. 1-9
117-23-66	75		117-7093	300	$17.00
117-7099	100		117-7091	400	17.00
117-2446-20	150	$17.00	117-7092	500	22.40
117-7100	200		117-23-11	750	31.30
117-2446-16	250		117-23-38	1000	31.30

420


420-G

PYROMETERS
DUAL CALIBRATION IN DEGREES F & C

Both case styles incorporate cold junction compensation and copper (resistance) compensation. Pyrometers are calibrated for 5 ohms or 10 ohms as indicated in the listing below. Pyrometers are supplied less the thermocouple. Give complete Cat. No. i.e., 117-1136260.

PYROMETERS

420 Cat. 117-	420-G Cat. 117-	Temp. Range °F	°C	† Type	Net Each
1136260	1139860	-150 to +120	-100 to +250	J	$40.90
1136261	1139861	0 to +300	-20 to +150	J*	40.90
1136262	1139862	0 to +500	-20 to +260	J	40.90
1136263	1139863	0 to +750	-20 to +400	J	40.90
1136264	1139864	0 to +1000	-20 to +540	J	38.60
1136265	1139865	0 to +1500	-20 to +820	K	38.60
1136266	1139866	0 to +2000	-20 to +1200	K	38.60

†Thermocouple types: J iron constantan; K chromel-alumel. *External resistance 5 ohms, all others 10 ohms.

360-G

361

367-A

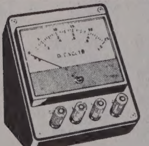
ELECTRODUNAMOMETER TYPE

For measuring the power consumption of electrical or electronic equipment. Model 361 is in a round case with a glass window. Model 367-A is in a molded black phenolic case with a glass window. Model 360-G is molded plastic with an unbreakable window.

Model	W. x H.	Barrel
361	3.500" Dia.	2.750" Dia.
367-A	3.000" x 3.000"	2.750" Dia.
360-T	3.500" x 2.990"	2.750" Dia.

SINGLE PHASE AC/DC WATTMETERS

Watts Range	Normal Volts	Normal Amps	Model 361 Cat.	Model 367-A Cat.		Model 360-G Cat.	
0-75	150	.5	117-1185601	117-1185701		117-1189701	
0-150	150	1	117-1185602	117-1185702		117-1189702	
0-300	150	2	117-1185603	117-1185703	$39.00	117-1189703	$43.30
0-750	150	5	117-1185604	117-1185704		117-1189704	
0-1500	150	10	117-1185605	117-1185705		117-1189705	
0-150	300	.5	117-1185606	117-1185706		117-1189706	
0-300	300	1	117-1185607	117-1185707		117-1189707	
0-600	300	2	117-1185608	117-1185708	$43.10	117-1189708	$47.40
0-1500	300	5	117-1185609	117-1185709		117-1189709	
0-3000	300	10	117-1185610	117-1185710		117-1189710	
0-75-150	150-300	.5	117-1185611	117-1185711		117-1189711	
0-150-300	150-300	1	117-1185612	117-1185712		117-1189712	
0-300-600	150-300	2	117-1185613	117-1185713	$51.80	117-1189713	$56.20
0-750-1500	150-300	5	117-1185614	117-1185714		117-1189714	
0-1500-3000	150-300	10	117-1185615	117-1185715	$56.90	117-1189715	$61.20



G/P PORTABLES
FOR SCHOOLS, LABS, AND SERVICE SHOPS

With clear-vue 3-1/2" plastic meter. D-C models use self-shielded bar-ring magnet movement, and are diode protected against instantaneous overloads. Vane-type A-C movements are fuse protected. Accuracy: ±2% on D-C and Vane Type A-C types; ±3% on rectifier type A-C and Ohms types. Unbreakable, black molded plastic cases are 4-1/4" x 3-7/8" x 4-1/4". All are equipped with 5-way binding posts. †Suspension type meter.

A-C RECTIFIER TYPE 350-G/P

Cat. No.	Full Scale Ranges And Functions	Net Ea.
117-3530	0-6-60-600V 1000 Ω/V	$56.40

A-C IRON VANE TYPE 330-G/P

Cat. No.	Full Scale Ranges And Functions	Net Ea.
117-3544	0-1 Amp	26.40
117-3545	0-5 Amp	26.40
117-3546	0-25 Amp	26.40

D-C TYPE 320-G/P

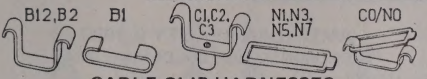
Cat. No.	Full Scale Ranges And Functions	Net Ea.
117-3500	0-1-5-25V 1000 Ω/V	$34.80
117-3501	0-25-100-500V 1000 Ω/V	35.50
117-3502	0-6-60-600V 1000 Ω/V	35.50
117-3503	0-50uA	32.40
117-3504	500-25-0-25-500uA	36.60
117-3505	0-0.25-1-5mA	33.80
117-3506	0-25-100-500mA	34.30
117-3507	0-1-10-100mA	34.30
117-3508	0-1-5-25A	34.80
117-3509	0-50-100-250mV	34.30
117-3510	0-3-15A	31.30
117-3511	0-10-50-250uA Suspension	66.40
117-3512	40-0-4uA Null Meter (Suspension)	45.60

OHMS TYPE 320-G/P

Cat. No.	Full Scale Ranges And Functions	Net Ea.
117-3560*	0-1K-100K	38.50
117-3561*	0-1 Meg.-100 Meg.	44.40

*Includes battery and test leads.

ELECTROVERT COMPONENTS



CABLE CLIP HARNESSES
FOR MULTI-WIRE CABLES

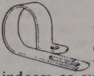
A fast and versatile system which permits on-the-spot changes without tools. The binders and cradles are nylon, clips are neoprene. Secure design withstands vibration without damage to wires. Standard color is black. Type CO/NO is complete, has captive nut for fastening to support. Type M is similar to Type C but has captive clip. Operating temp. -76° to +250°F.

RECOMMENDED COMBINATIONS

Cable Form Diameter	Mounted	Non-mounted
5/16"	CO/NO	....
¼–5/8"	C1 + N1	B + N1
½–11/16"	C1 + N3	B1 + N5
11/16–15/16"	C2 + N3	B12 + N3
15/16–1-1/16"	C2 + N5	B12 + N5
1–1¼"	C3 + N3	B2 + N3
1¼"–1½"	C3 + N5	B2 + N5
1½–2"	C3 + N7	B2 + N7

Cat. No.	Description	Per C 1-9	Net per 1000, Pkg. 500 1-10	11-30	31-75
433-CO/NO	Cradle	$11.20	$101.84	$96.76	$92.55
433-C1	Cradle	7.51	68.37	64.98	61.53
433-C2	Cradle	8.87	80.91	76.90	72.83
433-C3	Cradle	9.44	85.77	81.47	77.18
433-C1-M	Cradle	17.18	155.94	148.14	140.40
433-C2-M	Cradle	28.02	255.10	242.27	229.84
433-C3-M	Cradle	29.04	263.18	250.01	236.85
433-B1	Binder	6.22	56.90	54.01	51.19
433-B12	Binder	7.40	67.35	63.96	60.62
433-B2	Binder	8.81	80.00	75.99	71.98
433-N1	Clip	4.24	37.86	36.10	34.35
433-N3	Clip	5.71	51.81	49.49	46.56
433-N5	Clip	8.14	73.34	69.66	65.99
433-N7	Clip	10.00	90.23	86.73	82.32

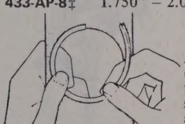
ADJUSTABLE P-CLIPS



For securely fastening cables or bundles in electronic or electrical equipment. Molded of virgin nylon to withstand extreme enviromental conditions, either indoors or outdoors. Bottom hole is elongated so that the clip is adjustable to a range of sizes as listed. Color matural. Hole clearance: *No. 4; †No. 6; ‡No. 10.

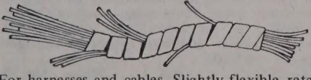
Cat. No.	Bundle Dia.	Per C 1-9	Net per 1000 1-5	6-10	11-50
433-AP-0*	.125" – .187"	$3.16	$28.41	$25.53	$23.00
433-AP-1*	.187" – .250"	3.28	29.56	26.57	23.92
433-AP-2†	.250" – .375"	3.45	31.05	27.95	25.07
433-AP-3†	.375" – .562"	4.20	37.72	33.93	30.59
433-AP-4†	.562" – .875"	5.46	44.28	39.85	38.76
433-AP-5‡	.875" – 1.187"	7.19	58.19	52.27	47.09
433-AP-6‡	1.187" – 1.500"	8.91	72.22	64.98	58.48
433-AP-7‡	1.500" – 1.750"	12.36	89.01	80.04	71.99
433-AP-8‡	1.750" – 2.000"	12.82	92.12	82.26	74.75

GROMMET STRIP
"SNIP-N-FIT"



A U-shaped, matural polyethylene (DFD-2005), strip-type grommet material which may be trimmed to fit any shaped hole without special tools. Also available in Ultraviolet and Fire Retardant polyethylene.

Cat. No.	Metal Thickness	Net Price per 100 feet 1-5	6-50	51-100	101-250
433-GS-2CP	.020" – .039"	$5.50	$4.62	$4.15	$3.75
433-GS-2ACP	.040" – .062"	5.99	5.03	4.67	3.95
433-GS-3CP	.063" – .099"	6.40	5.38	4.99	4.15
433-GS-4CP	.100" – .144"	7.36	6.18	5.72	4.90
433-GS-5CP	.145" – .187"	12.86	10.80	9.82	8.60
433-GS-6CP	.187" – .250"	18.56	15.59	13.86	11.90

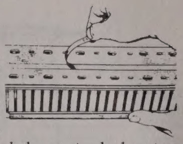


SPIRO-BAND

For harnesses and cables. Slightly flexible, retains its shape indefinitely. Handles easily without special skills or tools. Permits lead-offs or additions at any point. Each diameter handles a wide range of bundle sizes. Types listed here are natural polyethylene, but Ultraviolet Resistant, Fire Retardent, Nylon and Teflon types are also available. Prices and delivery on request.

Cat. No.	Bundle Range	Std. Pkg.	Per C 1-10	Per 1000 ft. 1-5	6-10
433-SP-1/8-NN	1/16" – ½"	100'	$10.95	$92.00	$75.00
433-SP-¼-NN	3/16" – 2"	100'	19.75	168.50	144.00
433-SP-3/8-NN	5/16" – 3"	50'	57.31	504.00	457.00
433-SP-½-NN	3/8" – 4"	25'	60.23	533.00	478.50

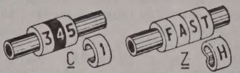
ELECTRO-DUCT
PVC WIRING DUCT



For enclosing wires and cables inside racks, consoles, etc. High impact PVC with interlocking channel and snap-on cover pre-scored, snap-off plastic fingers permit exit or entry of leads at any point along the length. All sizes of duct are now furnished with slotted mounting holes on standard centers. Temporary adhesive mounting. Open slot design with smooth rounded corners. Non-flammable and warp-proof with high dielectric strength. Withstands temperatures to 150°F. Resists oils, greases and salts. CSA approved. Those listed below are gray, but white is also available on special order. In 6 ft. lengths only.

Cat. No.	W (in.)	H (in.)	Std. Pkg.	Under 500'	501'-1000'	1000'-2000'
433-1010A-G	1	1	96'	$0.70	$0.56	$0.53
433-1020A-G	1	2	90'	.93	.93	.69
433-1030A-G	1	3	60'	1.14	.90	.84
433-2010A-G	2	1	108'	.99	.79	.71
433-2020A-G	2	2	54'	1.08	.86	.79
433-2030A-G	2	3	36'	1.33	1.05	.97
433-3010A-G	3	1	60'	1.24	.97	.93
433-3020A-G	3	2	36'	1.33	1.05	.97
433-3030A-G	3	3	24'	1.52	1.22	1.12
433-3040A-G	3	4	24'	1.81	1.46	1.34
433-4030A-G	4	3	24'	1.69	1.36	1.24
433-4040A-G	4	4	12'	1.99	1.59	1.47

CABLE MARKERS



For use in identifying single wires or jacketed cables. Made of durable PVC plastic. Stock colors are white with black markings but other colors are available on special order. Standard markings are 0 to 9, A to Z, and symbols +, -, ±, @. One character to each package. Specify marking. All markers come in standard packages of 50.

"C" MARKERS

"C" shaped to permit use on wiring already in place.

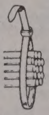
Cat. No.	Cable Dia.	1-100	101-250	251-500	501-1000
433-C2-P	.080" – .100"	$0.92	$0.75	$0.67	$0.59
433-C3-P	.100" – .118"	.92	.75	.67	.59
433-C4-P	.118" – .138"	.94	.77	.69	.60
433-C5-P	.138" – .156"	.96	.79	.70	.62
433-C6-P	.156" – .187"	1.01	.82	.73	.64
433-C7-P	.187" – .218"	1.14	.94	.83	.73
433-C8-P	.218" – .250"	1.25	1.03	.92	.80
433-C9-P	.250" – .280"	1.34	1.10	.98	.85
433-C10-P	.280" – .315"	2.24	1.83	1.65	1.48
433-C11-P	.315" – .350"	2.33	1.92	1.73	1.56
433-C12-P	.350" – .400"	2.50	2.05	1.84	1.66
433-C13-P	.400" – .460"	2.66	2.18	1.97	1.77
433-C14-P	.460" – .510"	2.87	2.36	2.12	1.92
433-C15-P	.510" – .570"	3.24	2.67	2.40	2.16

"Z" MARKERS

Completely closed loop for threading on wiring before installation.

433-Z22-P	.045" – .065"	$0.70	$0.64	$0.50	$0.43
433-Z20-P	.066" – .085"	.70	.64	.50	.43
433-Z18-P	.086" – .115"	.70	.64	.50	.43
433-Z16-P	.110" – .135"	.70	.64	.50	.43
433-Z14-P	.130" – .160"	.70	.64	.50	.43
433-Z12-P	.150" – .175"	.70	.64	.50	.43
433-Z10-P	.170" – .195"	.71	.69	.53	.47
433-Z9-P	.190" – .215"	.73	.71	.55	.49
433-Z8-P	.210" – .250"	.82	.78	.60	.52
433-Z7-P	.245" – .295"	.87	.84	.65	.57
433-Z6-P	.290" – .360"	1.19	1.15	.82	.71
433-Z4-1P	.355" – .460"	1.35	1.23	.93	.81

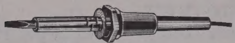
ETC PERMANENT WIRE TIES



An effective, easy, and economical method of bundling wire harness, cable runs, etc. Straps are molded of virgin nylon providing lightweight, resistance to absorption and abrasion, high tensile and dielectric strength. Resilience and chemical resistance to common solvents, oils and grease. ★Include complete Cat. No. i.e., 301-6001-400.

Cat. 495-★	Max. Dia.	Tensile Strgth.	Net Per C	Cat. 495-★	Max. Dia.	Tensile Strgth.	Net Per C
N-4-D	15/16"	18	$2.25	N-14-MB	4"	50	$14.80
N-5-C	1¼"	30	3.50	N-13-MA	3½"	120	19.25
N-7-B	1¾"	50	3.95	N-11-MC	3"	30	11.95
N-11-C	3"	30	7.25	N-7-MB	1¾"	50	5.55
N-13-A	3½"	120	13.90	N-5-MC	1¼"	30	5.20
N-14-B	4"	50	9.25	N-4-MD	15/16"	18	4.20

AMERICAN BEAUTY

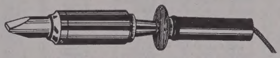


LITTLE DANDY SOLDERING IRONS

The economy-priced miniature iron that stands up to production line conditions. Steel cored heating element with non-ceramic insulator. Molded handle, aerated finger grip (impervious to oil, perspiration). Balanced, non-roll design. Plug type tips. Standard cords are 2-wire detachable; for 3-wire (NEMA) add "S3" to catalog no., and $0.70 to price column. All irons are supplied with a Paragon tip.

Cat. No.	Tip Temp. °F.	Watts	Tip Dia.	Shpg. Lbs.	Net Ea.
69-3108	805	20*	1/8"	1/2	**$8.24**
69-3110	835	25*	3/16"	1/2	**8.32**
69-3112	1030	40*	1/4"	1/2	**9.84**

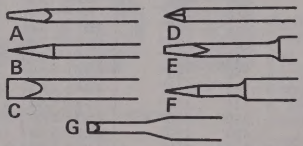
*Other wattages available on special order.



STANDARD IRONS

Long-life element. Nickel-chrome on steel core, compression wound, mica insulated. Each, 1100-volt tested. Seamless steel casing. One piece. Round. Lightweight. Balanced. Plug type tip inserts deep into element for quick heat. All irons are supplied with a Paragon tip. Models 3125 and 3128 have non-replaceable element. "X" suffix means"extra hot, for continuous duty". For 3-wire cord with NEMA plug, add suffix "S3" to catalog no. and $1.40 to price column.

Cat. No.	Tip Temp. °F.	Watts	Tip Dia.	Shpg. Lbs.	Net Ea.
69-3125	850	60	1/4"	1	**$12.00**
69-3128	850	60	1/4"	1	**11.12**
69-3138	855	100	3/8"	2	**14.64**
69-3138X	1025	175	3/8"	2	**16.32**
69-3138Y	855	100	1/4"	2	**14.64**
69-3138XY	1025	175	1/4"	2	**16.32**
69-3158	1000	200	5/8"	3	**19.20**
69-3158X	1000	250	5/8"	3	**20.72**
69-3178	1000	300	7/8"	4	**26.00**
69-3178X	1000	300	7/8"	4	**27.52**
69-3198	1010	550	1-1/8"	5¾	**33.84**

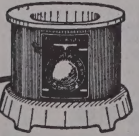


PARAGON® QUALITY TIPS

Multi-clad tips that outlast ordinary tips dozens-to-one. Pre-tinned points re-tin themselves as they work. Iron clad shanks do away with pitting, scaling. Overall chromecoat makes tip drip-proof and (with scientific tapering) as freeze-free as a tip can be.

Cat. No.	Fits Iron#	See Fig.	Net Ea.	Cat. No.	Fits Iron#	See Fig.	Net Ea.
502	3108	A	**$1.76**	**234**	3125,3128	A	**$2.08**
505	3108	D	**1.76**	**237**	3125,3128	F	**2.32**
507	3108	E	**1.76**	**268**	3125,3128	G	**2.32**
510	3108	B	**1.76**	**43-C**	3138	C	**2.56**
604	3110	G	**2.00**	**43-D**	3138	D	**2.56**
615	3110	E	**2.00**	**124**	3138	B	**2.96**
626	3110	F	**2.00**	**227**	3138	G	**2.96**
703	3112	G	**2.16**	**44-C**	3158	C	**4.16**
730	3112	E	**2.16**	**44-D**	3158	D	**4.16**
739	3112	F	**2.16**	**253**	3158	A	**4.48**
108C	3118	C	**1.76**	**45-C**	3178	C	**6.96**
108D	3118	D	**1.76**	**45-D**	3178	D	**6.96**
174	3118	A	**1.76**	**46-C**	3198	C	**10.88**
239	3118	B	**1.92**	**46-D**	3198	D	**10.88**
206	3125,3128	E	**2.32**	....	....	..	....

GENERAL PURPOSE SOLDER POT



Made of solid cast iron. Chemically stable to keep solder pure. Center tapped (5/16-18) for fixturing. Fast heat from two 300-W, long-life, cartridge elements. Brings solder to temperatures of 400°F. in 15 min.; 750°F. in 25 min. Adjustable thermostat range: 325-750°F. Holds 2½ lbs. of solder. Wt. 9 lbs.

Cat. 69-600	Solder Pot	**Net Each**	**$44.80**
Cat. 69-601	With Dross Skimmer	**Net Each**	**$48.00**

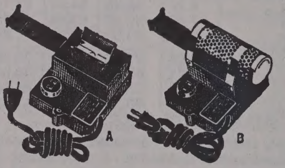
AMERICAN BEAUTY B-2000
MICROMINIATURE SOLDERING IRON

Developed specifically for soldering microminiature components such as high-density electronic assemblies or delicate instrumentation, particularly where some form of optical magnification is required in making the soldered joint. Balanced, featherweight (3 oz.) construction permits using like a pen. Complete unit consists of one-piece element-casing assembly, detachable Nylon handle and cord set, and screw-in copper tips. Overall length (less cord and tip) is 7". Working distance from hand to tip 3". Consumes 22½ watts on 110-120 v-ac/dc, delivers 700°F. of heat. Furnished in plastic box with 1 each of B-1, B-2 and B-3 tips.

Cat. 69-B-2000-L Soldering Iron Kit **Net $15.20**

PARTS			TIPS		
Cat.	Unit	Net	Cat.	Unit	Net 6
69-B-218	Element	**$12.00**	**69-B-1**	1/8" chisel	**$3.44**
69-B-230	Handle	**3.50**	**69-B-2**	1/16" chisel	**3.84**
69-B-240	Cord set	**2.80**	**69-B-3**	1/16" conical	**3.44**
....		.....	**69-B-4**	Bean conical	**3.44**

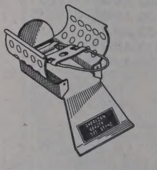
HEAT REGULATING STANDS
FOR 115-V



For regulating the temperature of an electric soldering iron while it is connected to current, but not in use. This prevents over-heating and lengthens the life of both iron and tip. Stands are equipped with an adjustable thermostatically controlled switch which operates to hold the iron at a constant temperature. Each stand has a 6-foot power cord and plug, and a receptacle for the soldering iron. SG types have a sturdy, perforated metal guard to prevent accidental contact with the hot iron. Shpg. wt. 3¼ lbs.

Cat. No.	See Fig.	Iron Watts	O'All Size L. W. D.	Net Each
69-475	A	80-660	6½" x 5-5/8" x 3-3/8"	**$16.00**
69-475-SG	B	80-660	9" x 5-5/8" x 5"	**20.40**

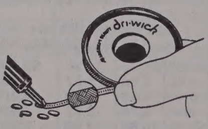
575 SAFETY STAND



For use with miniature soldering irons. Gravity controlled to close serated basket guard when iron is laid on stand. Guard opens when iron is lifted. Made of cadmium plated steel. For bench mounting. Overall size 6" x 2" x 4". Wt. .75 lb.

Cat.
69-575 Stand **Net $3.76**

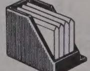
DRI-WICK
DE-SOLDERING TOOL ON A SPOOL



Dri-Wick is pure copper, specially woven, each strand coated with water-white, non-corrosive and non-conductive resin. When Dri-Wick is placed on a soldered joint and the tip of a 30-40 watt soldering iron placed on top of the Dri-Wick it soaks up the molten solder like a sponge soaks up water. Average length of Dri-Wick per un-soldered joint only one-half inch. Dri-Wick is furnished in 5-ft. lengths on special spools which prevent tangling, dangling and waste.

Cat. No.	For Type Of Circuit	Pad Size	Wick Width	Net 25 Spools
69-484-1	Micro-min. & I.C.'s	Up to .060"	.025"	**$29.75**
69-484-2	Miniature P.C.	.060" to .125"	.050"	**29.75**
69-484-3	Standard P.C.	.125" to .190"	.075"	**29.75**
69-484-4	Connectors	190" & up	.095"	**33.75**

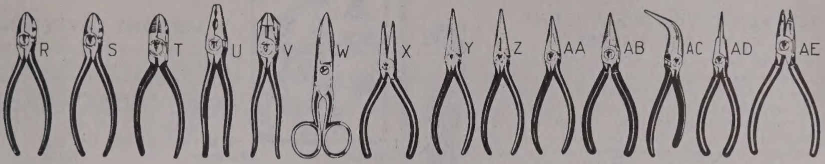
ONE-PASS TIP CLEANER



Cellulose sponges with 3/4" water well to keep them wet. High impact styrene holder has non-slip base. Size 2.5" x 2.75" x 3.5". Wt. .75 lb.

Cat. 69-480 Tip Cleaner **Net $1.94**

MATHIAS KLEIN & SONS TOOLS



FOR USE IN INDUSTRY

CUTTING PLIERS

Oblique cutting pliers for general use. Series 202 has blunt nose. Series 210 is for flush cutting, has no bevel on the blades. Fig. S has “W” stripping notches, sleeve openings and .052” skinning hole. Fig. T has “W” stripping notches and “V” notch for crushing insulation.

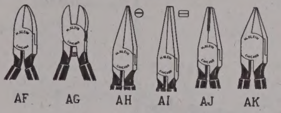
Cat. No.	See Fig.	O'All Lgth.	Jaw Lgth.	Net Each
65-D202-5	R	5½”	13/16”	$3.37
65-D202-6	R	6-1/16”	13/16”	3.51
65-D210-5C	R	5½”	13/16”	4.03
65-D210-6C	R	6-1/16”	13/16”	4.16
65-D202-5-SW	S	5½”	13/16”	4.08
65-D528-V	T	5”	5/8”	3.81

LINEMEN'S PLIERS

Type 333-8 reams inside and outside of conduit through 1”, tightens lock nuts in outlet boxes. Series 201 is for general lineman use, has heavy-duty side cutters and knurled insides on the tips of the jaws.

Cat. No.	See Fig.	O'All Lgth.	Jaw Lgth.	Net Each
65-D201-6	V	6¼”	1-3/32”	$3.85
65-D201-7	V	7-5/16”	1-9/32”	4.12
65-D201-8	V	8½”	1-7/16”	4.75
65-D201-9	V	9¼”	1-19/32”	5.15

In 1857 Klein Tools were first made to suit the special needs of the early telegraph line installers. Since then others, specially made for the requirements of telephone, electrical, industrial and electronic users, have been added. All are made of the finest materials, carefully fabricated and inspected. All types shown have plastisol grip handles.



PRECISION PLIERS

For electronic and other delicate service uses. Handles are dipped in colored plastic Suffix “C” indicates spring opening. Fig. AJ for transverse end cutting. *With knurled tips. †With plain tips.

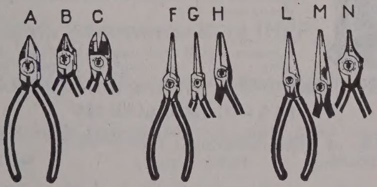
Cat. No.	See Fig.	O'All Lgth.	Color	Net Ea.
65-D257-4	AF	4-3/16”	Red	$2.95
65-D321-4-1/2	AH*	4-3/4”	Yel	2.59
65-D322-4-1/2	AH†	4-3/4”	Blue	2.77
65-D323-4-1/2	AI	4-3/4”	Yel	2.73
65-D224-4-1/2C	AJ	4-5/8”	Grn	3.61
65-D209-4C	AK	4-3/16”	Red	3.61

LONG NOSE PLIERS

Fig. X has jaw tip cutting efges for use in close trimming, printed circuit board work, etc. Fig. Y is for general use, has 3/32” tip ends. Fig. Z same as Fig. Y but with side cutters. Fig. AA is a chain nose type with 3/32” tip ends. Fig. AB is same as AA but with coil spring. Fig. AD is a needle-nose type for entry into small spaces. Jaw tip diameter 1/16”. Fig. AE was specially designed for cutting and skinning 24 gauge synthetic coated wire. Cutting knives are on the jaw tips, with a notch immediately behind for crushing insulation. Tapered nose for access into small spaces. *With side cutters.

Cat. No. 65-⋆	See Fig.	O'All Lgth.”	Jaw Lgth.”	Net Each
D211-6C	X	6½	1¾	$5.08
D301-5	Y	5-9/16	1-9/16	2.84
D301-6	Y	6-5/8	1-15/16	2.91
D301-7	Y	7-1/8	2-7/16	3.12
D203-5	Z	5-9/16	1-9/16	3.17
D203-6	Z	6-5/8	1-15/16	3.33
D203-7	Z	7-1/8	2-7/16	3.77
D317-6	AA	5-15/16	1-3/16	2.93
D317-5C	AB	5¼	1-1/8	3.11
D302-6	AC	6¼	1¾	3.71
D301-6SCPC	AD	6-5/8	1-15/16	3.88
D203-6SCPC*	AD	6-5/8	1-15/16	4.28
D317-5P	AE	5¼	7/8	4.03

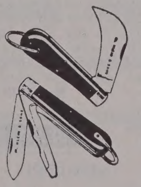
⋆Be sure to include entire Cat. No. when ordering.



FOR USE IN ELECTRONICS

Klein Pliers are drop forged from high-grade alloy steel made specifically to Klein analysis. Every plier is individually fitted, tempered, adjusted and tested. Those listed immediately below have been specially designed for close work in electronic equipment. Fig. A has oblique pointed nose for flush cutting. Fig. B is similar, but cut away at back for entry into narrow spaces. Fig. C has replaceable shear-cutting blade for hard or soft wire. Fig. F tapers to 1/16” tips. Fig. G has narrow jaws tapers to 1/16” tips. Fig. H has transverse end cutting jaws for clipping close. Fig. L jaws are 1/8” wide at tips. Fig. M jaws are 3/8” wide at tips. Fig. N jaws are 5/32” x 1/16” at tips. All types have plastisol handle insulators.

Cat. No.	Type Plier	See Fig.	O'All Lgth.	Jaw Lgth.	Net Each
65-D209-4C	Cutting	A	4-3/16”	½”	$3.61
65-D219-5C	Cutting	B	5”	5/8”	4.01
65-D310-6C	Long Nose	F	6-5/8”	1-15/16”	3.41
65-D318-5½	Long Nose	G	5-25/32”	1¾”	3.23
65-D224-4½C	Long Nose	H	6¼”	1½”	3.68
65-D306-5½	Duck Bill	L	5-13/16”	1¾”	3.35
65-D304-6	Duck Bill	M	6½”	2-5/16”	3.01



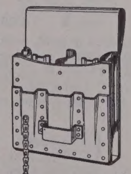
KLEIN KNIVES

LINEMAN'S KNIFE

This knife is sturdily constructed of highest grade cutlery steel. Blade is 3” long, and automatically locks in open position. Handle is made from special plastic which will not crack or chip. Fitted with wrought shackle riveted in handle. Single blade.
Cat. 65-1550-4 Top illustration **Net $2.72**

ELECTRICIAN'S KNIFE

This knife is very similar to the lineman's knife shown, above, except has one cutting blade and one screwdriver blade. Screwdriver blade locks in place when open. A slight touch of the thumb releases lock. Blades are made from carefully tempered cutlery steel.
Cat. 65-1550-2 Bottom illustration **Net $2.37**



ELECTRICIAN'S TOOL POCKET

A utility pocket of the finest soft and pliable leather. Has loop for belt, two large utility gussested pockets, two screwdriver pockets two tool loops, three plier pockets and one chain tape thong. Size 7” x 10”.
Cat. 65-5166 Each **Net $8.10**

ELECTRICIAN'S SCISSORS

For the electrician and mechanic. Made of high grade steel, carefully tempered. Nickel plated finish. Has screw hinge allowing adjustment. Model 2100-7 has lower blade serrated to prevent slippage when cutting wire, upper blade has stripping notches.
Cat. 65-2100-5 See Fig. W. With plain blades **Net $3.28**
Cat. 65-2100-7 See Fig. W. Serrated blade **Net $3.37**

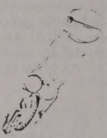
DYMO TAPEWRITERS®

1470 SLIMLINE TAPEWRITER®
FOR ½" VINYL TAPES

New "Slimline" design lies flat, may be stored in a small space, or carried in traveling case for instant use when on a business trip. Attractive black Cycolac plastic case with brushed chrome trim. Equipped with a special track for ½" vinyl tapes and embossing wheel for .200" letters A thru Z, numerals 1 thru 9, and characters, . and /. Features new "Designer" extended letters. Overall size 8¼" long, 2½" wide, and 1-1/16" high. Shipping weight 13¼ ozs. Furnished with one roll ½" plastic tape.

Cat. 374-1470-00 Slimline Tapewriter® **Net $24.95**
Cat. 374-1470-00 Tapewriter for ½" vinyl tapes **Net $24.95**
Cat. 374-1450-00 Tapewriter for ¼" & 3/8" tapes **Net $19.95**

M-11 TAPEWRITER®
FOR METAL TAPES



Embosses 5/32" high characters horizontally on ½" wide metal tapes. Hardened steel embossing wheel has upper case letters A to Z, numbers 0 to 9, slant line and period. Embosses 7 characters per inch. Built-in hole punch for escutcheon pins. Aluminum body with chrome finish. Length 10-3/8", width 3½". Shpg. wt. 22 oz. Furnished with 1 roll tape. M-11 may also be used for embossing vinyl tapes.

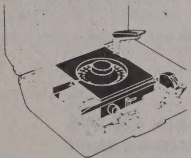
Cat. 374-1011 M-11 Tapewriter only **Net $54.95**

NEW 1570 TAPEWRITER®
FOR ½" & 3/8" TAPES

Has Tag-matic action. Chrome finish with black Cycolac accessories and polished aluminum wheel disc on a .200" designed extender letter wheel. Uses both ½" and 3/8" tapes. Includes 1 roll ½" tape.

Cat.	Description	Net
374-1570-00	Tapewriter for ½" & 3/8" tapes	$24.95
374-1550-00	Tapewriter for 3/8" & ¼" tapes	$19.95

SIGNMAKER 2300



Signmaker with brushed aluminum and black body embosses letters either vertically or horizontally on 3/4" Dymo tape. The unit comes equipped with a versatile 104 character embossing wheel (.5" horizontal letter size). Included in this easy-to-operate system is the 2300 Signmaker, one 3/4" x 36' magazine of black Dymo embossing tape and a rugged molded polyethylene carrying case that allows the Signmaker to go to "on the job" sites.

Cat. 374-2300-09 3/4" Signmaker **Net $149.95**

BLACK
Solid

DYMO® VINYL TAPES SELF-ADHESIVE BACKING

BLACK
Striped

3/8" WIDE TAPES

Cat. No.	Used in Moldels	Tape Lgth.	Tape Type	Net Ea.
374-5201	M-10, M-14, M-20, M-24	12'	Sol. B	$1.25

1/2" WIDE TAPES

Cat. No.	Used in Moldels	Tape Lgth.	Tape Type	Net Ea.
374-171	M-11, M-20, M-24	12'	Str. C	1.95
374-158	M-11, M-20, M-24	12'	Sol. E	1.65

3/4" WIDE TAPES

Cat. No.	Used in Moldels	Tape Lgth.	Tape Type	Net Ea.
374-5134	2300	36'	Sol. B	6.95

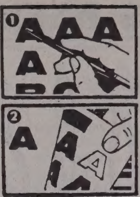
Sol. indicates solid color. Str. types have edges striped in gold, with center colors as indicated under the asterisk (*). Tapes are available in the color groups as follows: A = 1, 3, 4-9, 12, 13, 60; B = 1, 2, 4-9, 12, 13, 15, 60; C = 2, 5, 6, 8, 9; E = 1, 2, 4-9, 12-16, 22, 25, 60. When ordering add color suffix number to the catalog number to indicate the color wanted.

-1 Clear
-2 Red
-4 Orange
-5 Green
-6 Blue
-7 Yellow
-8 Brown
-9 Black
-12 Gray
-13 Gold
-14 Silver
-15 Purple
-16 Copper
-22 Flu. Red
-25 Flu. Grn.
-60 Walnut

1/2" METAL TAPES FOR M-11 TAPEWRITER®

Cat. No.	Description	Lgth.	Net
374-358	Aluminum, with adhesive backing	12'	$1.50
374-310	Aluminum, without backing	16'	.85

DATAK



INSTANT LETTERING

Individual letters or words can be transferred quickly, and neatly to any oil-free surface. Completely dry pressure sensitive ink. Gives a professional finish to chassis, schematics. Each box contains 24 sheets in easy-to-handle 3 x 5" size. *12 sheets. All letters and numbers 1/8" high.

Cat. No.	Character	Color	Net
400-9581	Alphabet/words/numerals	Black	$5.95
400-9591	Alphabet/words/numerals	White	5.95
400-9601*	Alphabets only	Black	3.00
400-9611*	Alphabets only	White	3.00
400-9621*	Numerals only	Black	3.00
400-9631*	Numerals only	White	3.00

ELECTRONIC SYMBOL DRAFTING KIT

Plastic sheets with rub-off electronic symbols designed to comply with MIL-STD-15-1A and ASA-STD-Y32.2 standards. .020 line width blends with =2 Rapidograph Pen or a 2H pencil. Included are sheets of letters and numerals for labeling purposes. Kit contains a total of 40 4¾" x 7¼" sheets.

Cat. 400-970 Electronic Drafting Kit **Net $19.15**

METER & DIAL MARKING KIT

Switch patterns, arcs, etc., plus letters and numbers for standard and special rotary tap switches, potentiometers, prototype and specially calibrated meter dials, etc.

Cat. No. 400-968 Complete Meter & Dial Marking Kit **Net $5.95**

TERMINAL & CHASSIS MARKING KIT

Set contains all the standard component identification letters, letter combinations, and numerals used in marking chassis, printed circuit and terminal boards, electronic panels.

Cat. No. 400-966 Complete set in black **Net $5.95**
Cat. No. 400-967 Complete set in white **Net $5.95**

DATAKOAT–CLEAR PROTECTIVE COATING

Designed for Instant Lettering Products. It is water-clear, dries quickly and protects against abrasion & weathering.

Cat. 400-04176 1 oz. bottles each of coating & thinner **Net $1.00**
Cat. 400-04177 16 oz. Datakoat Spray-On **Net $2.95**

MOODY
SCREWDRIVER KITS

Real small tools which are usually hard to find. Each kit contains a rust-proof, knurled barrel handle with a swivel-top and locking chuck. Blades are interchangeable. Packaged in attractive plastic top holder.

SC-5 TINY SET

Contains handle and one each of awl: .055", .070", .080" and .100" screw-driver blades.

Cat. 204-SC-5 Screw-driver Kit **Net $1.88**

PA-5 PHILLIPS/ALLEN SET

Contains handle, Phillips =0 and =1 driver blades, and =4, =6 and =8 Allen wrench blades.

Cat. 204-PA-5 Phillips/Allen Set **Net $2.63**

OE-5 OPEN-END WRENCH SET

Consists of 5 tiny offset open-end type wrenches, hex sizes: same sizes as BW-5 and all interchangeable in handle, which has a solid locking chuck. Wrenches are made of heat treated steel. A very handy set of tools to work on small motors and other similar devices. Set comes in the Moody Kit patent package.

Cat. 204-OE-5 Moody Kit Open-End Wrench Set **Net $2.63**

MS2 MACHINISTS' HOOK SCRIBER

Has knurled center on handle, with one straight and one hooked end. Overall length 9". Fixed points.

Cat. 204-MS2 Machinists' Scriber **Net $ .83**

We wish to thank the following manufacturers who have given permission and/or information for this guide.

Adel Tool Co.   Akro-Mils   Alco   Alpha Wire   Amperex   Amperite
Amphenol   Argos   Arrow-Hart   Atlas Sound   B & K (Dynascan)
Belden   Blonder-Tongue   Bogen   Bud   Bussmann   CTS
Centralab   Cinch-Jones   Clarostat   Clauss   Cornell-Dubilier
Dialight Corp.   Dumont   Eitel McCullough (Eimac)   Electrons, Inc.
Electro-Voice   Engler   Ersin (Multicore)   GC Electronics
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National Electronics   Ohmite   Pamotor   Pomona   Potter & Brumfield
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